ed in

ns?"

om-

said, ven!

INV '60

Established 1848.

evaporating, finishing, etc.

WORLD.

Sorgo Department.

steam; and describe pans for defecating, learn.

Mr. C. F. Miller, of Dundee, Minn.,

Washington Co., Mo., or something fur-

ther about that new cane seed of his,

mentioned in a recent issue of the RURAL

L. H. C., of Nemaha Co., Kansas, says

he made 3,000 gallons of syrup past sea-

son as a first attempt, and was very nice.

a cane stripper, header and bug picker

all in one machine that will do its work

L. B. C. of Lafyette Co., Mo., wants a

sorghum rig, mill and evaporator and

wishes us to tell him which is the best.

G. W. J., of Lafayette Co., Mo., says

he made 800 gallons of as nice syrup as

he ever saw, though his cane was caught

by frost before the seed heads were

formed. That was Kansas Ornnge but it

made 80 gallons to the acre, and sold at

50 cents a gallon by the barrel. He sends

Wm. Lemm, of Wabusha Co., Minn.,

asks why is not air employed in concen-

trating syrup to avoid scortching and to do the work faster, Says it has been em-ployed forty or fifty years, that he has tried it and thinks it nearly as good as the vacuum pan. He wishes also to know whether it will do to use charcoal in

Manufactures of Northern sugar cane

syrup and sugar should see to it that

their county, state, and district fair as-

place of bone coal for a filter.

other subscribers, for which, thanks.

well, and has capacity for any crusher.

He has made application for a patent on and oblige

Wants Seed.

COL. COLMAN: Having been engaged

in raising and manufacturing the Early

Amber cane for the past ten years, I am

good syrup that sells readily at 65 cents

The season was very late and not one-half the cane planted was cultivated, the weeds getting the start, consequently the seed did not mature, and I shall have

to get seed from some other locality. Will you please inform me through the columns of the RURAL WORLD where seed can be procured and at what prices,

Ans .- See our advertising columns.

New York Cane Growers' Meeting.

COL. N. J. COLMAN-The New York

State Cane Growers' Association, will

presentat your meeting .- ED.

meet us no more.

But what particularly impresses me is

some was quite green, the heads not all out, and yet it made nice syrup, free from the sorghum taste, but having a flavor of maple, which everyone says is very much better than what they can get it the fact that this sorghum industry is a flavor of maple, which everyone says is very much better than what they can get it is the fact that this connection too much stress cannot be laid upon the persence of the fact that this connection too much stress cannot be laid upon the persence of the fact that this connection too much stress cannot be laid upon the persence of the fact that this connection too much stress cannot be laid upon the persence of the fact that this connection too much stress cannot be laid upon the persence of the fact that this connection too much stress cannot be laid upon the persence of the fact that this sorghum industry is a flavor of maple, which everyones are strength of the fact that this sorghum industry is a flavor of maple, which everyones are strength of the fact that this sorghum industry is a flavor of maple, which everyones are strength of the fact that this connection too much strength of the fact that this connection too much strength of the fact that this connection too much strength of the fact that this connection too much strength of the fact that the fact that this connection too much strength of the fact that the fact that this connection too much strength of the fact that the fact

A Tribute.

L. H. R.

J. O., of Sidney, Ohio, wishes that confident that it is a profitable business

some one would give his experience in if conducted properly. I find that I know

making syrup, boiling altogether by very little about it, but would like to

wants the address of H. C. Thompson, of per gallon. Am unable to supply the

demand.

Leon, Ills.

ST. LOUIS, THURSDAY, JANUARY 18, 1883.

Mississippi Valley Cane Growers' Meeting Specific Cane Gravity. Sugar [CONTINUED FROM LAST WEEK.] On April 27 this same experiment was re peated, plot 3 being planted with sprouted seed and plot 4 with dry seed. Plot 3 came up on May 9 and plot 4 on May 11, there being only two days difference between the time required for the two plots to come up. In earn.

I have made this year 800 gallons of tage of the weather, as the four or five days of cold weather which immediately followed the planting of the two plots, retarded the growth of the sprouted seed. From this time on there was almost continuous rain up to May 15, and a heavy frost, with ice, occur-red on May 16. We were, of course, not sat-isfied with the test made, and concluded to *Stripped one week. †Topped while in blo wait till the weather became settled before trying again. But we should have had a te-dious time to wait for this the past season in our section of the country. However, May

26 being a warm, dry day, we concluded to finish planting the field, which we had laid out for our experimental plots. Plot 5 was again planted with sprouted

Plot 6 was planted with dry seed. Plot 7 was planted with dry seed, to each hill of which a small handful of slacked lime was thrown before the seed was cover-

Plot 8 was planted with dry seed, to each hill of which a handful of gypsum was add-

Says he wants to build a neighborhood mill and doesn't know how large to erect the house for it until he has some additional information. He is respectfully referred to our advertising columns. the 10th of February—time not definitely determined upon—but we think that will be the time selected. We would be glad to have you attend our meeting, and think you would not regret being present. If you cannot come, and will send me copies of the Rural World, I will take great pleasure in distributing them among the members, as I believe your paper to be almost indispensable to all who are cultivating sorghum or making syrup and sugar. I am anxious to see a full report of the proceedings of the Mississippi Valley Cane Growers' Association, and would be glad to have you send them to me as soon as published.

Yours Respectfully,

C. J. REYNOLDS,
Secretary, N. Y. S. Cane Growers' Ass'n.
Steuben Co., N. Y.
Since the above was in type we have ed.
Plot 9 was planted in the same way, with the addition of gypsum and sulphuric acid. The mixture of gypsum and sulphuric acid was made in the proportion of one ounce of strong sulphuric acid to one pound of gyp-

Plot 10 was planted as above, with the addition to each hill of a small handful of commercial superphosphate.

Plot 11 was planted with dry seed, no fer-tilizers, but rows twice the distance apart. The seed planted in these various plots on May 26th, all came up at about the same time, the sprouted seed not more than one day in advance of the rest.

It may be asked why lime,gypsum and a mixture of gypsum and sulphuric acid were em-ployed. In the first place, we wished to learn the effect, if any, of an alkaline fertilizer up-Since the above was in type we have advices that the meeting will be held on on the development of the cane, hoping that perhaps by this means, through the decomposition of the ammonium salts in the soil a juice might be obtained richer in sugar and the 7th, at 10 A. M. We shall try to be more free from albuminoids. The gypsum and the mixture of gypsum and sulphuric acid were employed as a control upon the Among the many thousand readers of sociations recognize the importance of the RURAL WORLD there is, I believe, this home industry. Call upon the managers, present them with an idea of its merits and claims to recognition and if needs be show them samples of your produce. Get your goods before the public by every means in your power. This must be done to remove prejudice and to convince the people that you can make an article deserving of their patronage.

At the annual meeting of the Michigan State Board of agriculture the question of the successful cultivution of sorghum devotedly and unceasingly in a despited cause. superphosphate. It is well known that superphosphates are prepared by treating ground bones or bone ash with a certain proportion of sulphuric acid, and that by the decomposition a certain amount of gypsum is formed. Now, in case we should get any desired effects from the use of super-phosphate, we wished to be able to say that

it was not due to the gypsum present, nor to the acid condition of the fertilizer.

Soon after the last planted seed was up, the whole field presented a varied appearstate board of agriculture in equestion of the successful cultivution of sorghum as a sugar producing plant was discussed, and premiums recommended at the next Statel fair for samples of sugar and molasses made from sorghum; the exhibitor to furnish a clear and concise statement of how it was grown and the process of manufacture. Thus is the good work progressing.

The question is being asked by stock men and feeders in all parts of the country whether the Northern sugar cane makes good fodder, and it may be answered in perfect confidence that there is none better. Cattle, horses, sheep and hogs not only devour it greedily but will leave everything else for it. For milch cows in its green or ance, and it was an interesting sight to no-tice the different stages of growth produced by the application of fertilizers, and by the it greedily but will leave evetything else for it. For milch cows in its green or semi-green state it is admirable.

Col. Colman: I have made 5,000 gallons syrup of a very fine quality, with no green taste, and it is graining finely—that is, what there is left of it. There will be more planted next year than this. The cape did not get rive here this year.

The cape did not get rive here this year. of the other plots, planted at the sar would have permitted. It was conceded by farmers, who visited the field, that the item of cultivation alone would go a great way toward recommending the use of this fertil-

For the benefit of those who were not able to see the plots growing, I made a collection of average plants of each plot and had them mounted. This was done on June 25th, nine weeks after plots 1 and 2 were planted, two months after plots 3 and 4 were planted, and one month after the other plots were planted. The average hight of the plants to the tip of

The average hight of the p the leaves was as follows: Plot 1, 20 inches. Plot 2, 20 "Plot 3, 16 "Plot 4, 16 "Plot 5, 12 "Plot 6, 12 "Plot 6, 12 "Plot 6, 12 "Plot 8, 12 "Plot 9, 12 "Plot 11, 12 "Plot 11 thay be stated here tha

May 26..

Plot 11, 12

It may be stated here that the plants of plot 10 were much more uniform in size than those of any of the other plots.

The next two stages in the growth of the plants, which were determined, were the time at which they began to head, and when the sake of convenience, these facts, including the time of planting, and the number of days required to reach the stage of hardening dough of the seed, is given in a—

TABULAR STATEMENT.

Date of Date of hardening Planting. Heading. April 20... Aug. 1... Aug. 31... April 27... ""
May 28... Aug. 14... Sept. 15...

cator?

to see whether stripping after it was thoroughly matured made any difference in the experiment two or three years ago. I think it would not hurt it to stand several days after it was thoroughly matured, but it will affect it very rapidly before it is ripe.

Prof. Weber-No difference in the amount of

syrup but a great difference in the amount of sugar. We cut one field of Early Orange be-

fore we were ready to work it up because we

were afraid it would freeze; it was cut and shocked for three weeks. At the time it was cut this cane had 3 per cent. of grape sugar

and 10 per cent. of cane sugar. We analyzed

it again three weeks after, and found it had

then 8 per cent. of grape sugar and 10 per cent of cane sugar. Three to ten is a very good proportion for making sugar. Eight to

ten is not so good.

A Member—Would it make the same amount of syrup?

Prof. Weber-I think it would be advisable to leave the blades on, especially in cold weather, though I do not think it would affect

Prof. Weber-Well, I can say this much in re

heated up the better. An advantage as you will see in using a closed defecator, is that the juice remains perfectly quiet, even after being heated above boiling point, allows the sedi-ment to collect on the bottom.

A Member—Did you try defecating juice from cane that had been wet or boiled?

Prof. Weber—No, sir, we hadn't any of that

Mr. Furness-(of Indiana)-What is your

udgement as to the length of time cane

should be cut before it is worked; would you

prefer to work it immediately after cutting, or to let it stand awhile? Prof. Weber—I would have it worked up im-

mediately; if it were cut a day in advance it

be the effect if this cane were to lie on the ground four weeks, exposed to considerable

rain; would it diminish the quantity or quality

A Member-Would it affect the color of the

Prof. Weber-I should think the color would

be just as light. If you added lime to it of

A Member—By an experiment made two years ago, I found that it made darker syrup, using no defecator, only settling and boiling

in the common way, with a pan somewhat The President—We will now listen to some remarks by Prof. Scovell, giving us a descrip-

tion of the Champaign Sugar Works and some history of the results obtained there. [CONCLUDED NEXT WEEK.]

rse it would naturally be darker than it

syrup-would it be more liable to make dark

that would, of course, spoil it,

er syrup?

Prof. Weber-Yes.

the same time?

the defecator?

Date of Plant- Date of Head- Date of Hardening Days ing.	September 5 19 September 2 16 September 3 18 September 3 18 September 5 18 September 5 18 September 6 18 September 7 18 September 8 18 September 9 18 September 19 18 September 19 19 September 10 18
Date of Do	September 5 September 24 September 24 September 30 September 5 September 5 September 7 Coctober 7 September 5 September 6 September 6 September 6 September 7 September 30 September 30 September 30 September 30 September 30 September 5
Date of Head- ing.	August 8
Date of Plant- ing.	April 20. August 8. August 28. August 28. August 8. Augu
	Golden Orange Amber St Orange St Orange Tail Uma B Hybrid Momoouth Momoouth In Nober

ANALYSIS OF FIELD CROPS. Specific Gravity. Early Orange.....1.059 Link's Hybrid....1.007 Liberian......1.06

Mr. Stebbins (of Penn): I would like to ask Prof. Weber what kind of phosphate was

Prof. Weber: It was the commercial super phosphate, purchased in Chicago; I don't know the brand, but it was nothing more than

A Member: 1 want to ask if there was any fermentation set in the cane that was topped? Prof. Weber: No, sir; we noticed none

A Member: It didn't extend into the body Prof. Weber: No. One thing we did notice and that was that small heads appeared at

the top of the cane soon after it was cut, and it was a question whether these would not diminish the amount of cane sugar as much as the original head did, but these seeds never

developed.

A Member: How much time elapsed from the time you cut these heads off till you worked up this cane? Prof. Weber: From the time the plants were in bloom till the hardening dough, was about

three weeks. A Member: And there was no fermenta

tion in all that time?

Prof. Weber: We didn't notice any, sir.

A Member: I would like to ask at what rate per acre the superphosphate was put on?

Prof. Weber: We put about one ounce of superphosphate into a hill; our hills were 3½ feet each way.

feet each way.

Prof. Tracy (of the State University): Were
the seeds planted on top of the phosphate, or
was the superphosphate put on afterwards?

Prof. Weber: The superphosphate was
thrown on first and the seed on top of it. of the syrup?

Prof. Weber-No, I don't think it would.

The President-If fermentation took place

thrown on first and the seed on top of it. *Prof. Muncie:* I would like to ask Prof. Weber if he has verified the experiments of putting the lime in when the juice was cold and putting it in when at a temperature of 180 degrees Fahrenheit? Prof. Weber: No; we put the lime in when

the juice was cold and didn't try it at any other temperature.

Mr. Hendershott (of Missouri): I would like to ask the Professor if they defecated with

steam or fire? Prof. Weber: Steam, with the steam coilcopper coil in the bottom of the defecator.

Mr. Allen (of Kansas): What degree of pressure was there on the cane in order to ob-

prof. Weber: Seven and one half pounds extra pressure to the inch; that is in addition to the atmosphere—22% pounds really.

tain the heat?

A Member: What pressure was on your boil-er—that is, what pressure of steam did you earry in the defecator? Prof. Weber: Usually 70 to 80 pounds. A Member: Do I understand that you carry from 70 to 80 pounds processed.

from 70 to 80 pounds pressure in your boiler and your steam trap is so set that it admits of a pressure in your defecator of 7% pounds?

Prof. Weber: The pressure in the boiler has nothing to do with it. The heating is done in a closed defecator by means of a copper coil, and as soon as it rises to the proper temperature the steam is cut off.

Mr. Jennings (of Iowa): Do you measure the temperature by means of a thermometer?

the temperature by means of a thermometer Prof. Weber: Yes, sir.
Mr. Belcher: How large is this closed defa-

Prof. Weber: The one we experimented with held 250 gallons.

A Member: Had it a movable cover?

Prof. Weber: No; it had a man-head at the Agricultural. top, but it was always closed—never open.

Mr. Roll (of Ohio): Did you test any cane

The Years' Wheat and Corn Crops.

No. 3, Vol. XXXVI.

The Statisian of the U. S. Department of Agriculture, furnishes the following figures exhibiting the corn and wheat products of the states named for the A Member: If the cane is cut and allowed to lay a week or ten days is there any difference in the amount of syrup or sugar obtained from the cane? years 1879, 1881 and 1882.

WHEAT BUSHELS. 1879. 1881. 1882. 463,600 47,284,853 31,353,000 45,461,800 51,110,502 56,822,000 52,302,990 31,154,205 18,248,000 27,538,600 17,324,141 19,309,000 27,538,600 13,847,007 13,840,000 14,947,200 Totals...... 231,702,204 169,091,000 244,439,300 CORN BUSHELS.

CORN BUSHELDS.

111,877,124 79,760,000 93,319,200
115,484,300 79,618,000 107,484,300
325,792,481 176,733,300 187,336,900
275,634,247 173,289,000 178,437,600
202,485,723 33,666,000 174,637,500
105,729,325 76,377,00 150,452,600
65,450,135 58,915,000 92,478,200 owa..... Missouri.... Totals...... 1,201,841,295 737,759,000 973,595,800

The Oats raised in the same States in 1882, were as follows: Ohio, 16,733,100 A Member—Is there any difference in the cane cut and shocked with the blades on and that cut and shocked with the blades off, in bushels; Indiana, 18,696,009; Illinois, 39,-141,000; Iowa, 44,555.700; Missouri, 30,-073,500; Kansas, 12,780,000; Nebraska,

Corn Root Worms.

9,417,650.

the amount of cane sugar in it.

A Member—Does it make any difference whether the juice is heated rapidly or slow in The corn root worm is about to teach farmers the propriety of a proper rotation of crops, as will be seen by the following gard to that, from experiments we made with this new defecator; the more rapidly it is from the Cincinnati Gazette:

Corn raisers have long looked on corn as the most reliable crop of the farm. Wheat had its fly; barley its worm, and potatoes their beetles; but till very recently the cutworm and mole and crow were the pests of the cornfield. But their depredations were on the corn so early in

depredations were on the corn so early in the season that there was hope of planting again, and yet making a crop after a raid of cutworms, crows and moles.

But now comes another pest that attacks the young and tender roots, and by clustering there in great numbers saps them of their strength, and the worms are so small as they bore through the roots that they are not visible to the naked eye. The farmer thinks his soil or the season at fault, and does not know the

Prof. Weber—I would have it worked up immediately; if it were cut a day in advance it wouldn't make any appreciable difference. It would no particular harm to cut in the afternoon and work it next morning, but I would not, by any means, allow it to lie longer than that.

A Member—How much would you consider it damaged for making sugar by being cut and allowed to lie on the ground three or four weeks?

Prof. Weber—It is almost good for nothing but for making sirup it is as good as ever, provided the cane is not soured.

Mr. Mayberry—For sirup or sugar which is your preference, to have it stripped or unstripped, and yet, when you consider the expense of stripping 200 or 300 acres of Early Amber, I believe I would take it leaves and all. The stripping costs more than all the rest of the harvesting put together, with us We ran it through, finally, without stripping in order to save that expense.

The President—It is, perhaps, well enough to state that the Champaign Sugar Wolks have two large mills—very large ones—and what might do there would not answer so well for small mills.

Mr. Deming—I would like to ask what would be the effect if this cane were to lie on the

Mr. Deming-I would like to ask what would is the destructive stage. In bad cases the corn is prevented from and cases the corn is prevented from earing, and much that bears ears will bring worthless nubbins. The development, as well as first growth, is retarded and the frost catches it—the corn sours and rots on the stalk. It sometimes destroys half or three fourths of the crow

destroys half or three-fourths of the crop.

Professor S. A. Forbes has found it at work wherever he has visited fields in Central Illinois.

Fields kept in corn more than two years

are worst affected. Where farmers observe good rotations there is little dang-As the beetle increases in numbers

As the beete increases in numbers throughout the country, there is reason to fear it will not confine itself to the fields where it has not been disturbed. It

fields where it has not been disturbed. It has no parasite, and birds have not yet been known to eat it.

It has never been known to feed on any of our plants but eorn, and if farmers will give suitable rotation the insect will do no harm.

Professor Forbes says: "The only measure offering any present hope of remedy is that of a frequent change of crops."

arrangements

an exhibition of the products of Northern sugar cane. The industry is growing with marvelous rapidity and must in the near future become of national importance. The products as now made only require to be seen and tasted to be not only appreciated but preferred to much of the syrup now in the market. By all means, then, offer inducements to the makers to exhibit their home made goods.

We have a very large number on hand from valued Northern

Northern Sugar Cane, crowded out in ply the names you wish. It is passing the meantime to make room for the pro- strange that breeders having such stock ceedings of the Convention, which we will not advertise it .- [ED. RURAL suppose, they would rather see than not. WORLD.

at the stores. If it was so light in color as the sale syrup, with the same flavor it now has, it would be worth the most. C. J. Omro, Wis.

Our friend, O. S. Powell, of River

ng more industry.

Wisconsin Cane Growers.

The cane did not get ripe here this year:

thought dead; and in this connection too much stress cannot be laid upon the persistency of Mr. Hedges' devotion. About twenty years ago many will remember a furore upon this same subject of sorghum sugar and syrup. Like many other premature enterprises, this failed, and those who had been its friends became its foes; the very name of "sorghum" became a by-word and an offense, and the very idea that any rational commercial results could be obtained from it was scouted at. Falls, Wis., who was one of the excursion be obtained from it was scouted at.

Falls, Wis., who was one of the excursion party to New Orleans, writes us as follows:

Gov. Colman: I arrived home on time and found all well. The weather was just warm enough not to spoil the sleighing, but it has been very cold for the last three days, the thermometer indicating from 18 to 22 degrees below zero. I have a letter from the Agricultural College, stating that the executive committee had agreed upon Feb. 13th, 14th and 15th as the time for holding the Wisconsin Cane Growers' meeting, and I now renew my invitation to you to be present at our meeting. I hope also to meet you at the Minnesota Cane growers' meeting, at Minneapolis, on the 17th inst. Our meeting will be a good one. Our people are becoming more and more interested in the cane industry.

Respectfully,

O. S. Powell.

Respectfully, O. Ş. POWELL.

of experiment and trial. GEO. C. W. BELCHER.

MISS

the Mis

rooms,

fine.the

esting,

of the

berries

points

variety

of mar

prefer

named

Prolifi

the sw

the ge

ing, th

tering

follow

found

the S

Ward

Cling La Gi

Geary

shoul

excee tions as so

publi

on th

givin

Mr

seate

grow

scare

bein

close

ciety Pi

lege

chei

1 of

dur

Vie iana

0

ers:

Mr.

Che Shepherd.

It is said that foot-rot, and other diseases to which sheep are subject, occare much less often among flocks which are pastured on rather rough ground, and particularly where they have to climb hills to get their grazing. In Scotland, the great country of Europe, the sheep are always found in greatest numbers among the mountain ranges. The famous Southdowns have also a rough country to pasture on, upon the steep rugged chalk-hills of the south of Eng-

A Big Boom in Sheep.

The Texas Wool Grower is credited with saying that "one of the most signifi-cant features in connection with the sheep cant features in connection with the sheep and wool industry in Texas is the fact that many of the 'cattle kings' in this commonwealth are investing in sheep on an extensive scale. These men have made fortunes in cattle, and realizing now that the cream of the profit in this line has been skimmed off, they are going into the sheep with the view of sharing the gains to be obtained in that line during the next five years. 'Straws show which way the wind blows,' and such signs as this indicate that a big boom in sheep is ahead." The Wool Grover expects to see ten pounds high grade merino ewes sell at \$10 per head, and that, too, before we are old enough to have great-grandchildren.

The Care of Sheep.

Hon. A. E. Kinney, at a meeting of the Plainsfield (Vt.) Agricultural Society, said he would recommend the following rules to be observed in the care of sheep:

With regard to management never starve a sheep, especially in summer.
 Do not feed much grain if you have good hay, but at all events never let your

good hay, but at all events never let your sheep grow poor.

3. Many farmers lose by letting their sheep live as long in autumn without feed as possible; consequently if they are in good condition in October, and lose flesh and are made to gain again, there will be a tender place made in the wool.

4. Have your lambs come in March, if coarse wool; in May, if fine.

5. Shear your sheep, if possible, before May 20th.

6. Keep your sheep from cold storms

fore May 20th.

6. Keep your sheep from cold storms at all times of the year, and be as careful of them as of your horse. Many sheep perish from showers after shearing, even in July; so, I say, shear at a time of the year when they can be housed for a week after shearing; and in storms in autumn, if the shear was expresed it takes a long. if the sheep are exposed, it takes a long time to dry the wool, and the sheep are consequently uncomfortable for a long time; colds and consumption are the re-

Raise the standard of your flock: weigh every fleece at shearing; number the sheeps and note the weight of the fleece, and then sell or kill your poores sheep, as like produces like, and your avwill soon go from four to seven

But little need be said about raising lambs; only take care of them and be sure especially to know whether the lamb is able to draw the milk. This is one great objection to have lambs come at the pasture, as they do not receive the attention they ought.

tion they cught.

Much more might be said with regard to the general management in feeding, salting, curing disease, castrating and docking lambs, but I have said enough, and it any hints I have suggested will prove of use to my brother farmers, I feel that I shall be amply repaid.

[Pulse A and 5 are of carrier succent.]

[Rules 4 and 5 are, of course, suscept-

ible to modification, according to climate.

—ED. RURAL WORLD.

Cotton Seed Meal.

Mr. E. Sharp, a well-known sheep breeder and wool grower of Texas, writes the following valuable information to the Texas Wool Grower:

"My experience with cotton seed meal as a feed for sheep has been extremely satisfactory. I am most thoroughly convinced that it is not only the best, but decidedly the cheapest sheep feed that can be procured, when properly manipulated. My mode of feeding it is to cut hay or straw, moisten it with water, putting on the meal and mixing it thoroughly. The meal being very adhesive, each of hay, straw or whatever may be used, becomes thoroughly enveloped in a long transparence of the western prairies, commonly called sage grass, good nay or straw, moisten it with water, putting on the meal and mixing it thoroughly. The meal being very adhesive, each of hay, straw or whatever may be used, becomes thoroughly enveloped in a coating of the meal, and will be eaten with a relish by either sheep or cattle. For the purpose of thus preparing it, I have a mixing trough that will hold about 1,000 bushels. I fed my herd of 1,000 ewes last winter entirely upon this feed. I commenced the first of December by giving them (1,000 head) a bulk of cut hay equal to about forty bushels. Upon this I sprinkled 125 pounds of the cotton seed meal—or, two ounces to each sheep. This was their regular feed until the 25th of December, when I increased Upon this I sprinkled 125 pounds of the cotton seed meal—or, two ounces to each sheep. This was their regular feed until the 25th of December, when I increased the meal to 150 pounds—equal to a little less than two and a half ounces per sheep. On the 20th of January I again increased it to 175 pounds, and on the 1st of February to 200 pounds. On the 1st of March I commenced decreasing until I quit feeding—March 20th. Hence the amount of meal fed to each sheep—breeding ewes—was: breeding ewes-was:

-Total-

From Feb. 1 to March

the best condition I ever saw a flock of

I put up my hay and corn, and can only approximate the cost. I bought my meal early in the season, at a reduced meal early in the season, at a reduced price, so that it just cost me \$20 a ton at my ranch. Hence, it cost me to winter my sheep just 17 6-10 cents per head for meal, and I think about 7 4-10 cents for hay, making a total cost of 25 cents per head; but, at \$24 per ton, it would increase the cost of wintering to 28 1-2 cents. Last winter a year ago I fed my sheep on corn, cotton seed, bran and hay, and it cost me about 63 cents per head, or two and one-half times as much as it r two and one-half times as much as it did last winter; and yet they were not half as well fed. I will take pleasure in explaining in

detail several experiments I have made in feeding cotton seed meal dry, both to cattle and sheep, all of which satisfy me that, for producing milk, fat or forming flesh, cotton seed meal has no equal.

E. SHARP. Meridian, Bosque Co., Texas. Difference in Wools. I feel somewhat like quarreling with the idea that so many have in supposing that a black gumny sheep is a sure in-cation of its fineness. The idea comes cation of its fineness. The idea comes more forcibly to my mind in consequence of hearing so many at our late fair express their minds in that direction. One would suppose that a few ounces of the article that is sure to bring a discount when we sell our wood suddenly becomes valuable when looking at the sheep. Even awarding committees very generally are guilty of this weakness, and you are very sure of seeing the futter of a red are gunty or this weakness, and you are very sure of seeing the flutter of a red ribbon in their wake, lodged near the abiding place of the blackest sheep on the ground. I have taken some pains to ascertain some of the reasons why their preference is given in that direction, and almost invariably the reason given is that an oily, gnumy buck is so much better to cross on the common ewes of the country. cross on the common ewes of the country.
Others claim that after using a gummy buck and getting their sheep graded up to the proper standard, they intend to breed for longer wool. Far better would it be to try by breeding to retain every particle of length that is possible, and grade to the required fineness, than to breed back and be obliged to go over the very same ground twice. It is much easier to retrograde in quality of wool than to advance. Short wool and coarse than to advance. Short wool and coarse than to advance. Short wool and coarse wool are easily produced, in fact they produce themselves if we but slacken our diligence one particle; try as best we may, some fleeces will be objectionable, and we are constantly obliged to keep turning off and weeding out in order to keep our flocks up to the proper standard. This system of keeping inferior animals when good ones could be equally well kept, and of course with better profit, is yery regood ones could be equally well kept, and of course with better profit, is very reprehensible; especially so when we remember the many facilities for getting good ewes, and rams. To possess a fairly good stock of ewes and a ram of good dimensions and wool, and of no chance breeding, is to have the first thing needed. But this in itself will not be sufficient if the necessary amount of forethought, energy and inwill not be sufficient if the necessary amount of forethought, energy and in-telligence is not forthcoming, and it is often owing to the want of these latter qualifications that so many failures occur.

Information Wanted.

is to be shipped to me? 9th.—About what will 120 Southwestern muttons bring in your market, after getting fat on grass in the spring, say in May or June?

I am like a man I once knew in Texas. I am like a man I once knew in I texas.
If all my sheep were to lay down and die,
if I had the money and could find the
sheep, I would invest again the next day.
I have some Arkansas sheep, but they
don't stand hardship like the merinos.

I am a subscriber for your much-prized and valuable paper, and expect to continue such as long as I grow stock.

Please give me the desired information in an early number, and oblige

J. J. S. Oakland, Indian Territory.

lambs born—no abortions, no premature births; mothers gave as much milk as the lambs required, and many of them more than the lamb could take; and today my lambs are the largest and my ewes the fattest—in fact, my flock is in the less condition. I ever saw a flock of the lamb could take the lamb could take; and to show the lamb could take the l any sheep that he recommends or sells as pure blood merinos will be surely such. 8th.-We believe that Mr. Gentry will not ask more than a fair and reasonable price, taking blood and quality into consideration, for his sheep. 9th.-That depends entirely on the supply and demand. Our market report will show from week to week the prices such stock commands at the stock yards.

THE WOOL MARKET.

Present and Prespective.

Under date of Boston, December 30th, we have the following report respecting the wool market:

The week and the year close with a better feeling in the wool market than better feeling in the wool market than has been noticed since the agitation of the tariff question began. The blunders of the commission have been thoroughly exposed and ventilated, and as they involve such gross perversion of the intent of the people, as well as of the commission itself, it is generally conceded that Congress will make the proper amendments. This faith has helped to restore confidence, though, until definite action is taken at Washington, the present uncertainty as to the schedule of duties finally to be adopted will continue to be a disturbing element. The decline in prices continues to attract buyers, and, prices continues to attract buyers, and, considering that we are in the height of the holiday season, we regard the sales of two million three hundred and fifteen thousand pounds of domestic wood during the week as a hopeful indication and forerunner of an active demand in January. We do not ignore the fact that some conservative dealers and buyers look for a further decline, and freely predict a 37 a further decline, and freely predict a 37 to 38c market for fine Ohio, and 35c market for fine Michigan fleece.

The judgment of some of these gentle-

men is entitled to respect, but in the present case we are obliged to differ from them. We believe prices have touched bottom, and in the absence of any unusual event, we expect to see our present quotations fully sustained hereafter. We are not predicting an advance, but we warn such buyers as are looking for fur-ther important concessions that they may be disappointed; and in their interest, as well as that of owners of wool, we hope

WEEK CLOSING JANUARY 6TH.

The new year opens with a better feel-The new year opens with a better reeiing in the wool market than has been
noted for several months. We are not
able to report any advance in prices, but
they are less irregular under an improved
demand. We repeat our views as stated
by us last week, when we said, "We believe prices have touched bottom, and in
the absence of any unusual event, we expect to see our present quotations fully pect to see our present quotations fully sustained hereafter."

Sales reported by Advertiser: Domes-c, 2,702,000 pounds; foreign, 40,000

pounds.
Sales reported by Journal: Domestic, 2,854,500 pounds; foreign, 40,000 pounds.
An analysis of the latter shows the sales to consist of 1,275,700 pounds of washed; 1,098,700 pounds of unwashed; 80,400 pounds of scoured; 399,700 pounds of pulled and noils; 10,000 pounds of cape, and 30,000 pounds of carpet wool.

Foot Rot in Sheep.

It seems strange that a majority of farmers, after attending a fair and seeing first-class animals of the different breeds, can return home and again pursue the same old process of breeding without one thought of improvement put into successful participation. An eminent English authority recomful practice. It seems that the old ruts in which our forefathers traveled have become so habitual to us that we are prone to follow on in the old way until mends the following treatment for foot rot in sheep: The earliest appearance of lameness should be followed by an immediate examination of the feet. All dirt, foreign bodies and detached horn should be carefully removed—carefully, of the set the latter is convented because so far as the latter is concerned, because I am of opinion there is entirely too much indiscriminate use of the knife practiced, diseased and sound horn alike being often randomly removed. Having pared away all detached horn, the exposed parts are to be dressed with a suitable agent. Those which have found most favor are: Col. N. J. Colman: I am much in need of information on a number of matters, and hope through the columns of your valuable paper to get it. I wrote to R. M. Bell last August for the same, but crude carbolic acid, one-half ounce; to be ton, too modest to use his own good well mixed and applied with a feather.
Where the horn in soft and spongy and
the discharge acrid, Finlay Dun recomthe discharge acrid, Finlay Dun recommends as a useful dressing an ounce each of cresote, turpentine and linseed oil, and in the absence of the first two ingredients (creosote has similar action to carbolic acid) in the formula I have given it will be found exceedingly beneficial. The same authority further advises, when the interdigital skin becomes involved, the dusting of it daily with powdered oxide of zinc or sulphate of copper, or the gentle application of nitrate of silver, a line of treatment in which I also fully agree. of treatment in which I also fully agree. When the bones, tendons, ligaments and joints become involved, treatment appli-cable to these conditions must be adopted on surgical principles. In such cases, Fleming observes: "It may be neces-sary to remove the whole of the hoof; and where there is necrosis, caries and ulcer-ation of the joints, which do not yield to any of the measures adopted, amputation of the affected phalanges may be resorted to, and with success when only one foot is involved. A valuable ram or ewe may in this way be saved, and its aptitude for breeding purposes be but little impaired. The end of the limb, after the amputation, is covered with a thick cicatrice of a horney nature, and it is only exceptionally that it meets the ground; the animal traveling short distances and any of the measures adopted, amputation the animal traveling short distances and grazing very well on three legs. Collat-eral treatment consists in avoiding, so far as possible, all conditions influencing the

Che Pig Pen.

Raising Family Pork on a Small Farm.

For the benefit of "small" farmers who read the RURAL, I here give my method of raising pork for family use: In the first place, I have a tight floor in my barn, and when feeding my stock I shake the dust out of the hay as well as the seeds and clover leaves and blossoms, recovering them all up once a day to preseeds and clover leaves and blossoms, sweeping them all up once a day to prevent them being soiled by unclean boots when I am feeding the stock. When gathered I put them in a tub or pork half-barrel in the yard near the kitchen door, and as the cooking stove has fire in it all day now, I can always get a kettle of hot water to pour over the stuff, which is at once covered. I fed three pigs from October, 1881, till September I, in the following way: I fill a patent pail with hay seed, leaves and clover blossoms; with this stuff I mix three pounds of wheat middlings three times a day for my three pigs, giving them a day for my three pigs, giving them a pailful of water each time, if there is no slop in the slop barrels. This feed will winter three pigs in good order, and if they get good slops from the house and have a warm pen to sleep in, they will they get good slops from the house and have a warm pen to sleep in, they will generally be too fat for breeding purposes. In summer I let them run on grass, but they are fed the usual amount of middlings and have the customary quantity of water or slop to drink. In September I feed green sweet corn, and in October I give them shelled corn and the middlings as usual. Here is my pig account for one year:

600 pounds of middlings in October 7 50 12 bushels of shelled corn, at 85c. 10 20

Net profit.....\$29 10 Hereabouts the manure is the only pay allowed farmers for keeping hogs, and so far as the amount and quality of the manure are concerned, I get as good pay as any of my neighbors and the \$29 10 for the refuse from my barn. Had I separated my sows in time last spring I would probably have four more pigs to sell. -As it was, they were dropped out of doors during a cold night, and as there were two sows on the place, the young things were found dead in the morning.

The Poultry Pard.

Periods of Incubation.

The period of incubation or time required in which birds sit on their eggs before the young are hatched varies in different species, as follows: Humming bird, 12 days; canary bird, 14 to 18 days; piezos 14; conveys bird.

14 to 18 days; pigeon, 14; common fowl, 20 to 22; turkey, 28 to 30; guinea fowl, 28 to 29; duck, 28 to 30; pea fowl, 28; goose, 35; swan, 40 to 45; parrot, 40. The authorities vary some as to the temperature necessary for the development of the recessary for the reces ment of the young bird—some put it at 104 degrees, others at 140 degrees Fahr. The chick of the common fowl on the fourth day of incubation attains the length of about one-third of an inch; length of about one-third of an inch; and then what appear to be voluntary motions are first observed. Ossification, or the process of forming bone, com-mences on the ninth day. Feathers ap-pear on the fourteenth day, and if taken out of the shell the chich can open its mouth; and about the nineteenth day, the air-vessel at the large extremity of the egg is ruptured and breathing be-gins.

Try Poultry Raising on the Farm Again. The ever genial and clever Phil. Thris

name, thus discourses on this subject in the Western Rural:

The investigations regarding the cause and nature of chicken cholera, made by the Department of Agriculture at Washington, have not been without good results. From experiments made it has been found that the germs of this disease are taken into the body with the food and drink and seldom if ever with the air inspired; that the ground on which diseased fowls are kept becomes infected with the virus from the excrements of the fowls; also that a one-half per cent. solution of sulphuric acid will destroy the germs. These are not the only facts brought out by these investigations, but they are enough, if intelligently acted upon, to make poultry raising a much upon, to make poultry raising a much safer business than it has been of late

years.

If their highest happiness is to "scratch," and it is, thought best that they be indulged in this, turn them into the field, or even the vegetable or flower garden, where they can have fresh ground in which to amuse themselves; but never have them range and scratch and each the same ground.

and scratch and eat on the same ground. The almost universal practice is to throw the food for poultry on the ground. In this way the fowls take up more or less dirt, and with it, if present, the germs of disease. As a preventive of the introduction or spread of the disease in this way, the foulth could be seen in the way, the foulth could be seen in the way. this way, the fowls should always have their food and water supplied them from clean vessels. Even dry grain, as corn, or wheat, should be given them in small

or wheat, should be given them in small boxes or troughs, from which they can pick the feed but cannot tramp it with their soiled feet.

The other point of interest and to be remembered is that should the disease make its appearance it may be checked and finally banished by the use of sulphuric acid. The floor of the poultry house, after being cleaned, should be well showered with the solution from the rose of a watering can, and the yard, so the prairie grazing or kept under court of the prairie grazing or kept under court of the prairie grazing or kept under court of the profit of

dissolved in two gallons of water will be found strong enough, and I am not sure but a solution of less strength would answer as well.

It is remarkable that eggs should be

selling at this time of the year, in Central filinois, at thirty cents per dozen, and young chickens at thirty-five to forty-five cents each. Such prices indicate the scarcity of poultry and eggs, and this in turn shows to what an extent discouragement in this line of industry has reached.

with the better knowledge now had of this malady known as chicken cholera, there seems to be no reason why the rearing of poultry should not again become a profitable business, even at prices far below those above mentioned. Poultry products on the farm should be more abundant, and could be, without doubt, were the extra care in management extra care in managemen above indicated more generally practic

Of the many thousands of poultry keepers in the country only a few have hens that lay in winter. This if not a fault, is at least a misfortune. Eggs are nice to have in cold weather either to There is no difficulty about it if you go at it right. Treat the hens decently, give them comfortable quarters, and feed them well and they will lay. If it should happen that under fair treatment they refuse to respond, they are a bad lot, and need to be suppressed and their places taken by a more appreciative set.

they can successfully withstand the se-verest weather if dry. In wet weather they should be confined in a yard under Fifty fowls will make, in their roosting

house alone, from 7 cwt. to 10 cwt. per annum of dry manure and poltry manure is richer than guano in ammonia and fertilizing salts. No orher stock will give an equal return in this way.

If you want the hens to attend strictly to business in the way of egg-production give them a chance. Warm break tion give them a chance. Warm break-fasts, clean water, broken oyster shells, some sheaf oats or wheat, some thick milk into which good bran is stirred, some cabbage or other green stuff, com-fortable, home-like roosting and laying apartments, a square meal of whole corn in the evening—and then see if they are not industrious and diligent in business.

ADVERTISEMENTS.

No Whiskey!

Brown's Iron BITTERS sone of the very few tonic medicines that are not composed mostly of alcohol or whiskey, thus becoming a fruitful source of intemperance by promoting a desire for rum.

Brown's Iron BITTERS is guaranteed to be a nonintoxicating stimulant, and it will, in nearly every case, take the place of all liquor, and at the same time absolutely kill the desire for whiskey and other intoxicating beverages.

Rev. G. W. RICE, editor of the American Christian Review, says of Brown's Iron Bitters:

Cin., O., Nov. 16, 1881. ing of vital force in business, pleasure, and vicious indulgence of our people, makes your preparation a necessity; and if applied, will save huneds who resort to saloons for temporary recuperation.

Brown's Iron BITTERS has been thoroughly tested for dyspepsia, indigestion, biliousness, weakness, debility, overwork, rheumatism, neuralgia, consumption, liver complaints, kidney troubles, &c., and it never fails to render speedy and permanent relief.

HALL'S Vegetable Sicilian

HAIR RENEWER

was the first preparation perfectly adapted to cure diseases of the scalp, and the first successful restorer of faded or gray hair to its natural color, growth, and youthful beauty. It has had many mitators, but none have so fully met all the requirements needful for the proper treatment of the hair and scalp. Hall's Hall Rexewers has steadily grown in favor, and spread its fame and usefulness to every quarter of the globe. Its unparalleled success can be attributed to but one. The use for stopping the Hall's Hall Rexewers woulderfully changes and improves the personal appearance. It cleanses the scalp from all impurities, cures all humors, fever, and dryness, and thus prevents baldness. It stimulates the weakened glands, and enables them to push forward a new and viscous growth. The effects of this article are not transient, like those of alcohile preparations, but tremain a long time, which makes its use a matter of economy.

Buckingham's Dye

FOR THE WHISKERS Will change the beard to a natural brown, of black, as desired. It produces a permanent color that will not wash away. Consisting of a single preparation, it is applied without trouble. PREPARED BY

R. P. HALL & CO., Nashua, N. H.

ADVERTISEMENTS.

KIDNEY-WORT FOR THE PERMANENT CURE OF . CONSTIPATION. o case, this remedy will overcome it. PILES. THE distressing comnplicated with constipation. Kidney. Wongthens the westngthens the west-PRICE \$1. USE Druggists Se KIUNEY-WORT

AN OFFER TO FARMERS.

I have invented a Self-supporting Board Fence; needs no posts, can be made in the barn on rainy days; costs 30 cts a rod less than post and board fence. It is not patented but for 30 cents I will send Illustrated Fence Treatise, telling how to make it, and one of the following premiums: 1st, a one-foot boxwood pocket rule. 2d, Kendall's Horse Book, 100 pages, 35 illustrations. 3d, one package of Sugar Trough Gourd, Acme Tomato, Prize Head Lettuce, Verbena and Phiox, or all the above for 60 ets.Address, WALDO F. BROWN, Box 75, Oxford, Ohio.

SPRING

now used by thousands all over the countit the greatest satisfaction. They wear a and ride easier, and bear a greater and sudden strain and are better adapted e country, as well as city roads, than any. They are manufest



ACME" Pulverizing Harrow, Clod Crusher & Leveler.



The "ACME" subjects the soil to the action of a Crusher and Leveler, and to the Cutting, Lifting, Turning process of double rows of STEEL COULTERS, the peculiar shape and arrangement of which give immense cutting power. Thus the three operations of crushing lumps, leveling off the ground, and thoroughly pulverizing the soil are performed at one time. The entire absence of Spikes or Spring Teeth avoids pulling up rubbish, is especially adapted to the inverted sod and hard clay, where other Harrows utterly fail; works perfectly on light soil, and is the only Harrowfor Cultivator that cuts over the entire surface of the ground.

Highly commended by scientific and practical Farmers, many of whom pronounce it to be the most valuable recent improvement in farm Machinery, while

All agree that "The judicious use of an implement like the "AOME" Pulverizing Harrow Clod Crusher and Leveler, in the "prepar ation of the Soil, before planting, will increase the "yield from Five to Ten Dollarsper Acre."

FAIR PLAY.

If your dealer does' not keep the "ACME" for sale, don't let him palm off an inferior tool on you by assuring you that he has something better, but SATISFY TOURSELF by ordering one ON TRIAL. We will send it on trial, and if it does not suit, you may send it back, we paying return freight charges. We don't ask for money or Note until after you have tried it on your own farm.

dreds of Testimonials from 44 dif-ferent States and Territories. NASH & BROTHER, Manufactory and Principal Office, Brauch Office, LARRISBURG, PA. MILLINGTON, New Jersey.

N. B.—Pamphlet entitled "TILLAGE IS MANURE" will also be sent to parties who name this paper.

THOMAS Smoothing Harrow.

-It carried off the-

HIGHEST PREMIUM Over all competitors at the great Centennia?

exhibition.

The best harrow for pulverizing the ground. The best harrow for preparing the soil for grass or other seeds.

The best harrow for covering seed.

The best harrow for cultivating winter wheat in the spring, adding largely to the yield.

The best harrow for cultivating young cornsorphum or potatoes, as it thoroughly destroys the weeds and does not tear out the plants.

plants.

The teeth being made of solid steel are slanting backwards, and thus never clogging, slanting backwards, and thus never clogging. stanting backwards, and thus never clogging, do not tear up corn, cane or potato plants, but destroys all light-rooted weads.

Every farmer should have it. Send for illustrated circular to the manufacturer's southwestern agent, CHAS. E. PRUNTY, Dealer in Carlo and Chas.

Dealer in Grain and Grass Seeds, No. 7 North Main St., St. Louis, Mo. Fishing Nets, - AND-

FISHING TACKLE. Trammell, Hoop and Bird Nets always on. hand. Send for Price List.

C. & F. CHENOT, No. 324 SOUTH MAIN ST., ST. LOUIS, MO.

JOHNSON'S ANODYNE LINIMENT,

For Internal and External use. Cures neural-gia, Diphtheria, Croup, Asthma, Bronchitis, Influenza, Sore Lungs, Bleeding at the Lungs, Chronic Hoarseness, Hacking Cough, Whoop-ing Cough, Chronic Rheumatism, Chronic Dysentery, Cholera Morbus, Kidney Troubles, Diseases of the Spine and Lame Back. Send for pamphlet. I. S. JOHNSON & CO., Boston, Mass.

Situation Wanted by an unmarried man keeping all kinds of stock, in England and America, who is sober, industrious and not afraid of work. Is competent to take charge of a stock farm, and to attend to the breeding and management of all kinds of live stock to the entire satisfaction of his employer. Can give good references. Address, "Foreman," care RURAL WORLD, St. Louis.



\$225 A MONTH-AGENTS WANTED-90 best selling articles in the world; 1 sample free. Address Jay Bronson, Detroit, Mich. \$72 A WEEK, \$12 a day at home easily made. Costly Outfit free. Address TRUE & Co., Augusta, Mc.

mai refe 113 has

> lan On fre loc has fai is rie

sui rai tio ea a 1 co

m an th qu

E OF

IERS.

ag Board
ade in the
rod less
patented
ded Fence
ad one of
foot boxrse Book,
tekage of
to, Prize
r all the
BROWN,

IICLES

outh LLS cal for

an im-g Har-in the ng, will Dollars

E" for

R.

UM

wheat g corn, ly de-out the

el are

gging, lants,

TY,

S,

ys on

MO.

T.

eural-

esting, and, taken altogether, this was one of the best meetings the Society has had for some years.

Mr. Hopkins read a paper on Strawberries, in which he stated the good points of an ideal variety to be: 1sthardiness; 2d-productiveness; 3d-size; 4th-quality. He said that the model variety had not been discovered, but that of many varieties that he had grown he preferred the following, and in the order named, viz: Chas. Downing, Miner's Prolific. Windsor Chief.

Mr. Underwood and others discussed the sweet potato question at some length, the general experience being that with careful handling so as to avoid all bruising, there was very little trouble in win-

Cling, Morris' White, September Queen, La Grange, Nanticoke, Heath, Steadley, Geary's Hold-on.

Several members thought that Smock should be added.

F. S. Earle, of Cobden, Ill., read an exceedingly interesting paper on "Parasitic Fungi." Engravings of the illustrations used are now being prepared, and as soon as they are completed we shall publish the paper in full in the RURAL

Mr. Holsinger gave an excellent talk on the urgent necessity of fruit-growers giving more attention to the prevention of insect ravages, believing prevention better than care.

Mr. Slichter, of Kansas, read a paper on Forestry, in which he took a very roseate view of the immense profits of treegrowing in Kansas, and was followed by Hon. F. P. Baker, United States Commissioner, who lamented [the growing searcity of timber throughout the West, and urged the establishment of government forests and forest schools.

The exhibition of fruit was remarkably fine, nearly every specimen on the tables being free from any blemish. At the close of the meeting a committee was appointed to make an exhibit of fruits at the Mississippi Valley Horticultural Society at New Orleans, in February next.

most deserving of American grapes if properly treated. Its requirements are: than ever before for men with heads, not empty heads, nor pumpkin heads, but heads full of determination and practical good lively warm and dry soil, it must have good cultivation, especially during a dry season, and, above all, it must be pruned short. As it is apt to overbear with long pruning, it is best to plant it about 5 by 5 feet, and train it to stakes and

missouri Horticultural.

The Twenty-sixth Annual Meeting of the Missouri State Horticultural Society was held in the Merchants' Exchange rooms, in Kansas City, on December 19-22.

The exhibits of fruits were unusually fine, the papers and discussions very interacting and taken altogrether, this was one entire and taken altogrether this was one entire and taken altogrether this was one to the first that is one of the, if not the, safest to plant. It is one of these, if not the, safest to plant. It is one of the, if not the, safest to plant. It is one of the, if not the, safest to plant. It is one of the, if not the, safest to plant. It is one of the, if not the, safest to plant. It is one of the, if not the, safest to plant. It is one of the, if not the, safest to plant. It is one of the, if not the, safest to plant. It is one of the, if not the, safest to plant. It is one of the, if not the, safest to plant. It is one of these is one of the, if not the, safest to plant. It is one of the, if not th at the end it looked the brighest of some at the end it looked the original at the end it looked the original forty varieties. Much is promised us of a seedling of the good old variety, the Beauty. It is said to be much larger in bunch and berry, also a stronger grower

Beauty. It is said to be much larger in bunch and berry, also a stronger grower than its parent.

A number of good seedlings have been produced here in the West from the Taylor. The Elvira is one of the oldest, very productive, and hardy, but its tender skin will ever keep it from becoming a profitable market grape. Missouri Riesling, Grim's Golden, and a few other Taylor seedlings produced by Mr. Grim are highly promising. It is indeed from American sorts that we must expect to raise seedlings which will be equal in quality for the table and wine to the best European grapes, and the Taylor, as worthless as it is, may yet become one of the great-grand-parents of some of our bestAmerican grapes.

The Concord is yet, and will be for some time to come, the grape for the million.

ing, there was very little trouble in wintering the potatoes in any ordinary cellar.

Mr. P. M. Kiely, of St. Louis, gave the following as a list of peaches which he had found most profitable as market sorts for the St. Louis market, for Missouri farmers: Alexander, Early Rivers, Crawford's early, Crawford's late, Foster, Ward's late, Old Mixon Free, Newington Cling, Morris' White, September Queen, Highland.

The Concord is yet, and will be for some time to come, the grape for the million, but the desire for something better in quality, with the vigor of this fine grape, has induced many to produce seedlings therefrom. Thus we have the Triumph, Martha, Lady, Worden, Early Victor, Moore's Early, Pocklington and others, nearly all hardy and vigorous as well as productive. The Concord is yet, and will be for some time to come, the grape for the million, but the desire for something better in quality, with the vigor of this fine grape, has induced many to produce seedlings therefrom. Thus we have the Triumph, Moore's Early, Pocklington and others, nearly all hardy and vigorous as well as productive. The Concord is yet, and will be for some time to come, the grape for the million, but the desire for something better in quality, with the vigor of this fine grape, has induced many to produce seedlings and therefrom. Thus we have the Triumph, Moore's Early, Pocklington and others, nearly all hardy and vigorous as well as productive. The Concord is yet, and will be for some time to come, the grape for the million, but the desire for something better in quality, with the vigor of this fine grape, has induced many to produce seedlings of the produced many to produce seedlings of the parents of some very valuable hybrids, of these for something to supplie for the million.

Highland. Of the latest varieties the Norton and Cynthiana are some of the best black varieties, and Goethe the best of all the late for table and wine.

The above essay was read at the late meeting of the Missouri State Horticultural Society.

How Far Apart to Plant Fruit Trees... This subject is creating some discuss-

ion in Southern Illinois. Our practice has been to plant 20 feet apart, and after 30 years experience we would not plant closer. A writer in the Farmer and Fruit Grower says that he has found by talking with peach growers in his vicinity that it is pretty generally conceeded that 20 feet is near enough, and close planting is not profitable; not a few of the most successprofitable; not a few of the most successful advocate 22 feet on good, strong ground. The peach growers on the Lower Hudson, Jersey, Delaware and Maryland plant close, we admit, and are in a measure successful, but we cannot attribute their success to their mode of planting, but rather to their climatic influences, thorough cultivation and manner of trimming. They do not get such a large growth in orchard or nursery as we do. Not a few of the Eastern growers contend that by giving the trees more res contend that by giving the trees more room, they raise better peaches and of course obtain better prices, especially in seasons of protracted drouth. This also is the experience of most all the Western growers that have written on this subject, Prof. Tracy, of the Agricultural College, reported that during the past year he had planted for the Society 58 varieties of apples, 17 of peaches, 42 of pears, 5 of failures of others in this vicinity for 22

BY G. F. ESPENLAUB.

Another year's experience has taught us once more where to plant grapes. It has also proved again in what varieties the most money is made. The late frosts in spring reached the vineyards on low lands, as well as only partially low. Only the highest hillsides and ridges escaped the frosts altogether.

Those highest hillsides are also more free from rot and mildew than the lower locations. Distance of planting, too, has a good deal to do with success or decations. Distance of planting, too, has a good deal to do with success or failure, 7 by 9 feet; or 6 by 10 feet, apart is none too much for strong growing varieties. Low training on the trellises, is productive of rot and mildew, as it prevents circulation of air, near the earth's surface, which is very essential during rainy or cloudy weather.

Now as to the varieties. A number of new kinds are before the public for trial, some of which may prove great acquisitions to our grape list. Among the earliest new varieties is the Early Victor, a native of Kansas, of Concord origin and comes highly recommended. Telegraph, not a new variety, but not planted near as much as it should be, is large in bunch and berry, very compact, hangs well to the bunch until quite late, and of fair quality, a very hardy vine.

The old Delaware I consider one of the most deserving of American grapes if properly treated. Its requirements are: Pruning Evergreens.

A moderate pruning or shortening back may be given late in summer after the terminal buds have formed, the pruned terminal buds have formed, the pruned branches thickening and becoming hardened by slight growth. If done much later, the trees will be rendered somewhat tenderer and not endure winter so well. Heavy pruning, when required, is performed to best advantage in spring, just as growth is commencing. Any time in the growing season the shoots may be pinched back for securing a compact and symmetrical form. These rules apply to hardy, free-growing evergreens. hardy, free-growing evergreens.

Fence Posts that Will Last.

A writer in an exchange says: I discovered many years ago that wood could be made to last longer than iron in the ground, but thought the process so simple that it was not well to make a stir about that it was not well to make a stir about it. I would as soon have poplar, basswood or ash as any other kind of timber for fence posts. I have taken out basswood posts after having been set seven years that were as sound when taken out as when first put in the ground. Time and weather seemed to have no effect on them. The posts can be prepared for less than two cents a niece. This is the rethan two cents a piece. This is the re-cipe: Take boiled linseed oil and stir in pollverized coal to the consistency of paint. Put a coat of this over the timber, and there is not a man that will live

Whitewash and Limewash.

Before you whitewash a wall, wash it well with a brush and clean water. To well with a brush and clean water. To make whitewash, put some whiting into a basin, pour water on it, mixed them up well, wait till the whiting has all sunk to the bottom, and then pour the water away. Repeat this two or three times, if you want your whitewash to be a good color, and not to have a dirty yellow tinge when on the wall. Then mix the cleaned whiting with water into a mikcleaned whiting with water into a milklike fluid, and add a little melted size or dissolved glue, also a small quantity of "powder blue." The more size you add the less will the whitewash when dry "rub off" on the clothes. The blue is added to correct the yellow tinge. To make limewash put some freshly-burned quicklime into a pail; pour on enough water to cover it; add at once a pint of boiled linseed oil to each gallon of the wash; and then add more water until the mixture is thin enough to use. In putting on either whitewash or limewash always draw your broad, flat brush in like fluid, and add a little melted size or always draw your broad, flat brush in the same direction, that is, if at starting you move it from east to west, do not afterward move it from north to south or from top to bottom.

Root Pruning. The experiments were made on the ap-ple and pear. A vigorous apple tree, eight or ten years old, which had searcemade any fruit buds, has done best when about half the roots were cut in one season and half three years later, by go-ing half way round on opposite sides in one year and finishing at the next prunone year an inising at the less principle, working two feet underneath to sever downward roots. It has always answered well also to cut from such trees all the larger and longer roots about two and a half feet from the stem, leaving the smaller and weaker ones longer and go-ing half way round, as already stated. The operation was repeated three or four years later by extending the cut circle a years later by extending the cut circle a foot or two further away from the tree. By this operation unproductive fruit trees become thickly studded with fruit spurs, and afterward bore profusely. The shortening of the roots has been con-tinued in these experiments for twenty years with much success, the circle of years with much success, the circle of roots remaining greatly circumscribed. The best time for the work has been found

was declared bad—not in the sense of being spurious, that is of course, but of being made from insufficiently rectified spirit produced from some substitute for

center of the sloped face of the stock, downward, and another in the slope of the scion upward; this, if carefully done, leaves a tongue-like strip on each face, and they are to be slipped together, so that the smooth face of the scion touches that of the stock and both are bound together by the cuts made. Tie with strips of cloth covered with melted tallow and beeswax. Every part of the cut surface when exposed to the air and light must be covered with these cloth strips, which are pressed and an impervious covering made. There is a modification of this system of grafting in which, if the stock is much larger than the scion, the cut in a cap and put it down to the bottom. The fuse burns at the rate of subtra foot a minute, rigney with a little. is much larger than the scion, the cut in the stock is made of only the width of the

scion.
Another variation of this system con-Another variation of this system consists in side-grafting, which is performed on the side of a stock without cutting the entire head off. If a valuable tree has lost a branch from any accident, a side-graft put in will soon supply the deficiency. This is of particular advantage in the case of ornamental trees on a lawn, where a branch blown off by the wind often spoils the looks of a tree unless some speedy method of restoration less some speedy method of restoration is adopted. In such a case you are to select the spot where you wish the new branch to start from, pare off the bark and a little wood, cut the seion to fit, and warn placed.

Virginia, the two Carolinas and Florida have, so far, profited most by this new industry. This cultivation of early veg-etables in the South has resulted in a etables in the South has resulted in a complete change in the Northern markets, and the seasons for vegetables and fruit there have greatly altered. Strawberries formerly came in June in New York, and tomatoes about July. Tomatoes to-day appear on the streets of that metropolis in February, coming from Bernuda; Florada tomatoes soon follow; then Geografia and so, on northward metropolis in February. then Georgia, and so on northward, until the New Jersey and Long Island crops

til the New Jersey and Long Island crops are finally reached.

Of the wonderful profits of truck farming in the South much has been said, but volumes yet remain untold. A strawberry farm near Charleston has been found to yield a better harvest than a cotton plantation, and a Georgia farmer now makes a fine living from a lot of assnarants.

asparagus. This truck farming experiment is being supplemented in Tennessee by fruit dry-ng—a brand new industry. Chattanooga, ing—a brand new industry. Chattanooga, Tenn., which two years ago®did not ship a pound of dried fruit, has already shipped 720,000 pounds this year, and this new industry being found very profitable, is, of course, growing rapidly. Such are the discoveries made by our sister States of the South. Louisiana. unfortunately, is utilizing very little of her rich lands in raising these minor, but paying crops.

paying crops.

Storing Potatoes.

There are three methods of storing potatoes in general use, each of which has its merits and its champions. These are storing in barrels, bins, heaps or pits. The same general principles underlie these several methods, viz: Protection against frost and temperature, freedom from moisture and avoidance of heating and the feature of th rom mostare and avoidance of heating caused by storing too deep. The ad-vantages claimed for storing in barrels are that the roots are easily handled, do safer beverage; for though glucose obtained from the potato entered largely into the composition of many of the specimens examined, this in itself is not injurious to the health; while hops, absent in most cases, were innocuously replaced by quassi and similar barks.

The result of the analysis of the samples of cognac recalls the famous dictum of the Italian inn-keeper, that wine can be made from anything—even from grapes; for, owing to the ravages of the phylloxera in recent years in the charente district, and the high price which wine commands, all the so-called cognas ince 1878 has been made from spirit distilled from grain, beet, root or molasses. One-half of the brandy tested at the labratory was declared bad—not in the sense of

The Chicago Grocer contains the following:

being spurious, that is of course, but of being made from insufficiently rectified spirit produced from some substitute for grapes.—[St. James Grzette.

Notes Upon Gratting.

The time was when few persons understood about grafting trees. It was rather a mysterious art and generally some person in each neighborhood did all the grafting that was required. But since the agricultural journals began to illustrate with pen and pencil the practical operations of horticulture, every farmer's son can, if he will, change the tops of an old orchard or start a new one, as he chooses. Each year, however, there are some who wish to practice this ancient art, to whom notes upon the methods used are timely and available.

The proper season for grafting is in the spiring, when the say it hosticulture. art, to whom notes upon the methods used are timely and available.

The proper season for grafting is in the spring, when the sap is beginning to circulate; and there are many kinds of grafting in vogue, all, however, agreeing in essential particulars. The requisite is that the inner bark of the scion shall exactly unite with the inner bark of the stock, and they should be kept in close contact till the union is complete. In some ways grafting is more troublesome than budding, but it gives a quicker start. For nursery stock it is usually advantageous to use budding wherever practicable, but grafting is preferred for orchard work.

On small trees where stock and scion are of nearly the same size, whip or tongue grafting is usually the method preferred. Scion and stock are cut obliquely and at the same angle. Next, a narrow slit is to be made, nearly in the

A small charge of dynamite will split the toughest roots into pieces that can be conveniently handled. Bore a hole nearly through the solid part of the root, insert the fuse in a cap and put it down to the bottom. The fuse burns at the rate of about a foot a minute, giving with a little calculation ample time for the operator to get out of the way.

The best results from wood ashes are The best results from wood ashes are secured by adding a small proportion of common salt. Ashes contain all the mineral elements of the plant, and they exert a good influence in unlocking fertility that would not be otherwise available. In burning anything the chlorine it contains is carried off with the smoke, and salt, chloride of sodium, supplies the deficiency.

Intelligent orchardists discovered the branch to start from, pare off the bark and a little wood, cut the scion to fit, and wrap closely.

Truck Gardening.

The advantages to be derived from the cultivation of early vegetables and fruits are just beginning to be appreciated by the South. Louisiana, we are sorry to say, has not profited by these crops as fully as her sisters. Tangipahoa, it is true, has been shipping some early fruit North, and the river parishes have made some money in potatoes and onions; but we have not yet made as much out of our rich soil and soft climate in this respect as we might.

Intelligent orchardists discovered the advantages many years ago of fertilizing the davantages many years ago of fertilizing the ground in apple orchards by top-dressing such trees, partly dying and pronounced entirely superannuated, so far recovered by copious and broad heavy crops. At a late meeting of the Dayton Horticulturul society, Mr. Way-trees remarkable for their unfruitfulness. He heavily finantages many years ago of fertilizing the ground in apple orchards by top-dressing with yard or stable manure. We have seen old trees, partly dying and pronounced entirely superannuated, so far recovered by copious and broad heavy crops. At a late meeting of the Dayton Horticulturul society, Mr. Way-tree reserves the superannuated by copious and broad heavy crops. At a late meeting of the Dayton Horticulturul society, Mr. Way-tree reserves the superannuated by copious and broad the south of the pronounced entirely superannuated, so far recovered by copious and broad the south in the ground in apple orchards by top-dressing with yard or stable manure. We

Experience is modifying the views of many potato growers who have heretofore favored cutting the seed very fine. Years ago one or two eyes in a hill invariably produced an abundance of
sprouts and a large crop of full-sized
potatoes. More seed produced a large
number of very small tubers unfit for
marketing. Now so large a portion of
the seed is defective that there are often
not more than one or two eves on a potato not more than one or two eyes on a potato capable of making vigorous plants. Plant-ing the whole potato is therefore coming in vogue, and unless great care is taken in selecting the potatoes there will be many missed or an outcome of poor hills.

ADVERTISEMENTS.

LINCOLN READS A POEM. HONEST OLD ABE ENTERTAINS HIS CABINET WITH A LITTLE QUOTATION.

"Now, gentlemen, you all have more or less soctry in your souls; listen to this," and Abralam Lincoln, then President, rose from his hair, in his office in the White House, and adaptive membling tones, which indicated his war profound appreciation of it, Dr. O. W. Iolines' "Last Leaf," of which the following re two verses:

wo verses;
"They say that in his prime,
Ere the pruning kuife of time
Cut him down;
Not a better man was found
By the crier in his round
Through the town.

Now the mossy marbles rest On the lips that he had pressed In their bloom: And the names he loved to he ar Have been carved for many a year On the tomb."

On the tomb."

Mr. Michael Guilfoyle, of Binghamton, N. Y., is not as old as the venerable Boston citizen of whom the poet wrote with such tender pathos, yet he is more than three score and ten. "For the past eight of those years," he writes, "I have been a perfect cripple from rheumatism, hobbling about the best I could with my cane. I took PARKER'S GINGER TONIC, and am now supple and strong as a gymnast. There is no trace of the disease left about me."

mast. There is no trace of the disease left dools me."

Mr. R. W. Mosher, wholesale druggists, of Binghampton, writes Messrs. Hiscox& Co., of Few York, Proprietors of the Tonic-certifying to Mr. Guilfoyle's declaration.

Having all the properties of any preparation of ginger, Parker's Ginger Tonic is a remedy of infinitely greater range and nower. It cures all diseases arising from an hopper state of the blood or imperfect digestion. Dyspepsia (and all its consequences), Malarial Fevers, Sick Headache, Kidney troubles, Bronehitis, and common Coughs and Colds, vanish at its tonich. Prices, 40 cents and \$1 a bottle. Larger size the cheaper.

AYER'S

Cherry Pectoral.

No other compaints are so insidious in their attack as those affecting the throat and lungs; none so trilled with by the majority of sufferers. The ordinary cough or cold, resulting, perhaps, from a trifling and unconscious exposure, is often but the beginning of a fatal sickness. AYER'S CHERRY PECTORAL has well proved its efficacy in a forty years fight with throat and lung diseases, and should be taken in all cases without dolay.

"In 1857 I took a severe cold, which affected my lungs, induced sleep, and passed night for the continued use of the PECTORAL, which relieved my lungs, induced sleep, and afforded me therest necessary for the recovery of my strength. By the continued use of the PECTORAL, a permanent cure was effected. I am now 62 years old, hale and hearty, and am satisfied your CHERRY PECTORAL savedime. Horace Fairmenthem. Rockingham, V., July 15, 1882.

"I thave used AYER'S CHERRY HECTORAL In my they can be also as a second of the permanent cure is the most effectual remedy for coughs and colds we have ever tried. A. J. CRANE. Lake Crystal, Minn., March 13, 1882.

"I suffered for eight years from Bronchitts, and after trying many remedies with no success, I was cured by the use of AYER'S CHERRY PECTORAL.

Byhalia, Miss., April 8, 1882.

was cured by the use of A JOSEPH WALDES.
TORAL.

Byholia, Miss., April 5, 1882.

No case of an affection of the throat or lungs
No case of an affection of the throat or lungs
exists which cannot be greatly relieved by the use
of AYER'S CHEMRY PECTORAL, and it will caleage
cure when the disease is not already beyond the
control of medicine.

PREPARED BY

AVER & CO., Lowell, Mass.

Dr. J. C. AYER & CO., Lowell, Mass. Sold by all Druggists.

Holman's Pad ACTS BY ABSORPTION THEOUGH THE Nerve Forces

THE CIRCULATION. The only true Malarial Antidote. It is the only known remedy that positively expelsevery vestige of Malariat taint from the blood without the use of poisonous drugs. It is a possitive Preventive and One.

Dr. Holman's Stomach and Liver Pad is a Sovereign Remedy for

CHILLS AND FEVER, And every other form of Maleria, all Stomach and Liver Proubles, Nervous and Sick Headaches, Chronic Diarrices, Only of Picture 19 Bissasses, and many of inscretions and advice free of charge by addressing G. W. Holman, M. D. Full treatise sent on a papilication. For sale by all first-class Druggists, or sent by mail, postpaid, on receipt or price. "Rigglar" Pad, \$2.00; Kidney Pad, \$2.00 Lung Pad, \$3.00.

Beware of Hogns and Imitation Pads. Assorber Dr. Holman's, Take no other.

HOLMAN PAD CO., 744 Breadway, New York. Box 2112. ADVERTISEMENTS.

DARBYS Prophylactic Fluid.

DARBYS PROPHYLACTIC FLUID,

and epidemic.

Also, as a Gargle for the Throat As a Wash for the Person; And as a Disinfectant for the House.

A CERTAIN REMEDY AGAINST ALL CONTAGIOUS DISEASES.

It neutralizes at once all noxious odors and gases. Destroys the germs of disease and septic (putrescent) floating imperceptible in the air, or such as have effected a lodgement in the throat or on the person.

A certain remedy against all contagious cases.

Perfectly Harmless, used Externally or In-

J. H. ZELIN & CO., Proprietors. MANUFACTURING CHEMISTS, PHILA. Price, 50c per bottle; pint bottles, \$1.

A NOTED BUT UNTITLED WOMAN. [From the Boston Globe.]



The above is a good likeness of Mrs. Lydia E. Pink The above is a good likeness of Mrs. Lydia E. Pinkham, of Lynn, Mass., who above all other human beings may be trutifully called the 'Dear Friend of Woman,' as some of her correspondents love to call her. She is sealously devoted to her work, which is the outcome of a life-study, and is obliged to keep six lady assistants, to help her answer the large correspondence which daily pours in upon her, each bearing its special a burden of suffering, or joy at release from it. Her Vegetable Compound is a medicine for good and not evil purposes. I have personally investigated it and am satisfied of the truth of this.

On account of its proven merits, it is recommended

On account of its proven merits, it is recommended and prescribed by the best physicians in the country. One says: "It works like a charm and saves much pain. It will cure entirely the worst form of falling

One says: "It works like a charm and saves much pain. It will cure entirely the worst form of falling of the uterus, Leucorrhoa, irregular and painful Menstruation, all Ovarian Troubles, inflammation and Ulceration, Floodings, all Displacements and the consequent spinal weakness, and is especially adapted to the Change of Life."

It permeates every portion of the system, and gives new life and vigor. It removes faintness, flatulency, destroys all craving for stimulants, and relieves weakness of the stomach. It cures Bloating, Headaches, Nervous Prostration, General Debility, Sleeplessness, Pervous Prostration, weight and backache, is always permanently cured by its use. It will at all times, and under all direumstances, act in harmony with the law that governs the female system.

It costs sully \$1, per bottle or six for \$5., and is sold by druggists. Any advice required as to special cases, and the names of many who have been restored to perfect health by the use of the Vegetable Compound, can be obtained by addressing Mrs. P., with stamp for reply, at her home in Lynn, Mass.

For Kidney Complaint of either sex this compound is unsurpassed as abundant testimonals show.

For Kidney Complaint of either sox this compound is unsurpassed as abundant testimonials show.

"Mrs. Pinkham's Liver Pills," says one writer, "are the best in the world for the cure of Constitution, Biliousness and Torpidity of the liver. Her Blood Purifier works wonders in its special line and bids fair to equal the Compound in its popularity.

All must respect her as an Angel of Mercy whose sole ambition is to do good to others.

Philadelphia, Pa. (X) Mrs. A. M. D.



THE OLD RELIABLE HALLADAY STANDARD WIND MILL GUARANTEED Superior to any other make. 17 Sizes-1 to 40 H. Power Adopted by U.S. gov. at forts and garrisons Adopted by U.S. gov. at forts and garrisons and by all leading R. R. Cos. of this and other Countries. Also, the Gelebrated I X L Feed Mill.

U. S. Wind Eng. & Pump Co., Batavia, Ill. THE SOUTH AND SOUTHEAST.

SHOULD YOU CONTEMPLATE A TRIP to Nashville, Chattanooga, Atlanta, Charleston, S. C.; Savannah, Ga.; Jacksonville, Fla., or in fact any point in the South or Southeast, it will be to your interest to examine the advantages over all other lines offered by the St. Louis, Iron Mountain & Southern Railway—"Iron Mountain Route"—in the way of Fast Time. Elegant Equipment, etc.

etc.

At present a Daily Train is run from Saint Louis Grand Union Depot, attached to which will be found an elegant Fullman Palace Sleeping Car, which runs through to Nashville, Tenn., where direct connections are made with Express Trains of connecting lines for points mentioned above. This Train connects at Nashville with the Jacksonville Express, having a Fullman Falace Sleeping Car of the very finest make attached, which runs change.

For further information, address.

For further information, address Ass't Gen'l Pass. Ag't,
St. Louis.

F. CHANDLER,
Gen'l Pass. Ag't,
St. Louis.

AGENTS WAN LD EVERYWHERE to see ting Machine ever hvented. Will applied stockings with HEEL and Treat variety of fancywork for which there always are adopted for credit and the see that t

\$66 a week in your own town. Terms and \$5 outfit free. Address H. Hallet & Co., Portland, Me. \$5 to \$20 per day at home. Samples worth \$5 free. Address STINSON & Co., Portland, Me.

The

the M

was l

The

hardi

variet

name

Proli

lar. Mr

follo

found

ford'

War

Gear

tions

publ WOI

bette

Hon

T

poir

1 of

larg 119

ian

lem

for

que

Foot-Rot in Sheep.

It is said that foot-rot, and other diseases to which sheep are subject, occare much less often among flocks which are pastured on rather rough ground, and particularly where they have to climb hills to get their grazing. In Scotland, the great country of Europe, the sheep are always found in greatest numbers among the mountain ranges. The famous Southdowns have also a rough country to restrict the state. country to pasture on, upon the steep rugged chalk-hills of the south of England.

A Big Boom in Sheep.

A Big Boom in Sheep.

The Texas Wool Grower is credited with saying that "one of the most significant features in connection with the sheep and wool industry in Texas is the fact that many of the 'cattle kings' in this commonwealth are investing in sheep on an extensive scale. These men have made fortunes in cattle, and realizing now that the cream of the profit in this line has been skimmed off, they are going into the sheep with the view of sharing the gains to be obtained in that line during the next five years. 'Straws show which way the wind blows,' and such signs as this indicate that a big boom in sheep is ahead." The Wool Grower expects to see ten pounds high grade merino ewes sell at \$10 per head, and that, too, before we are old enough to have great-grandchildren. great-grandchildren.

The Care of Sheep.

Hon. A. E. Kinney, at a meeting of the Plainsfield (Vt.) Agricultural Society, said he would recommend the following rules to be observed in the care of sheep:

1. With regard to management never starve a sheep, especially in summer.
2. Do not feed much grain if you have good hay, but at all events never let your sheep grow poor.
3. Many farmers lose by letting their sheep live as long in autumn without feed as possible; consequently if they are in good condition in October, and lose these and are made to exist these flesh and are made to gain again, there will be a tender place made in the wool.

4. Have your lambs come in March, if coarse wool; in May, if fine.

5. Shear your sheep, if possible, before May 20th.

6. Keep your sheep from cold storms at all times of the year, and be as careful of them as of your horse. Many sheep perish from showers after shearing, even in July; so, I say, shear at a time of the year when they can be housed for a week after shearing; and in storms in autumn, if the sheep are exposed it takes a long. if the sheep are exposed, it takes a long time to dry the wool, and the sheep are consequently uncomfortable for a long time; colds and consumption are the re-

Raise the standard of your flock; weigh every fleece at shearing; number the sheep and note the weight of the fleece, and then sell or kill your poores sheep, as like produces like, and your avwill soon go from four to seven

But little need be said about raising lambs; only take care of them and be sure especially to know whether the lamb to draw the milk. This is one

ag able to draw the milk. This is one great objection, to have lambs come at the pasture, as they do not receive the attention they ought.

Much more might be said with regard to the general management in feeding, salting, curing disease, castrating and docking lambs, but I have said enough, and if any hints I have suggested will prove of use to my brother farmers. prove of use to my brother farmers, I feel that I shall be amply repaid.

[Rules 4 and 5 are, of course, susceptible to modification, according to climate. -ED. RURAL WORLD.

Cotton Seed Meal.

Mr. E. Sharp, a well-known sheep breeder and wool grower of Texas, writes the following valuable information to the Texas Wool Grower:

Texas Wool Grover:

"My experience with cotton seed meal as a feed for sheep has been extremely satisfactory. I am most thoroughly convinced that it is not only the best, but decidedly the cheapest sheep feed that can be procured, when properly manipulated. My mode of feeding it is to cut hay or straw, moisten it with water, putting on the meal and mixing it thoroughly. The meal being very adhesive, each of hay, straw or whatever may be used, becomes thoroughly enveloped in a each of hay, straw or whatever may be used, becomes thoroughly enveloped in a coating of the meal, and will be eaten with a relish by either sheep or cattle. For the purpose of thus preparing it, I have a mixing trough that will hold about 1,000 bushels. I fed my herd of 1,000 ewes last winter entirely upon this feed. I commenced the first of December by giving them (1,000 head) a bulk of cut hay equal to about forty bushels. Upon this I sprinkled 125 pounds of the cotton seed meal—or, two ounces to each Upon this I sprinkled 125 pounds of the cotton seed meal—or, two ounces to each sheep. This was their regular feed until the 25th of December, when I increased the meal to 150 pounds—equal to a little less than two and a half ounces per sheep. On the 20th of January I again increased it to 175 pounds, and on the 1st of February to 200 pounds. On the 1st of March I commenced decreasing until I quit feeding—March 20th. Hence the amount of meal fed to each sheep—breeding ewes—was:

—Total—

Sth.—If I purchase a sheep from him, what is reasonable for the sheep, as he is to be shipped to me?

9th.—About what will 120 Southwestern muttons bring in your market, after getting fat on grass in the spring, say in May or June?

I am like a man I once knew in Texas. If all my sheep were to lay down and die, I had the money and could find the sheep, I would invest again the next day. I have some Arkansas sheep, but they ordered the sheep and the sheep are the sheep as the stop of the sheep are the sheep as the stop of the sheep as the stop of the sheep as the stop of the sheep as the sheep as the stop of the sheep. I would invest again the next day. I have some Arkansas sheep from him, what is reasonable for the sheep, as he is to be shipped to me?

I am like a man I once knew in Texas. If all my sheep were to lay down and die, I had the money and could find the sheep, I would invest again the next day. I have some Arkansas sheep from him, what is reasonable for the sheep, as he is to be shipped to me?

I am like a man I once knew in Texas. If all my sheep were to lay down and die, I had the money and could find the sheep, I would invest again the next day. I have some Arkansas sheep, but they of the sheep as the stop of the sheep.

-Total-Days. oz. lbs. oz.

From Dec. 1 to Dec. 25 2 3 2
From Dec. 25 to Jan. 25. 30 2 4-10 3 12
From Jan. 20 to Feb. 10 3 2 10 1 10

kept up all day, or several days at a time, I would, instead of forty bushels, give them 500 to 1,000 bushels of hay, thereby giving to each animal the same bulk of feed each day, whether out on the prairie grazing or kept under cover all day.

the best condition I ever saw a flock of

I put up my hay and corn, and can only approximate the cost. I bought my meal early in the season, at a reduced meal early in the season, at a reduced price, so that it just cost me 820 a ton at my ranch. Hence, it cost me to winter my sheep just 17 6-10 cents per head for meal, and I think about 7 4-10 cents for hay, making a total cost of 25 cents per head; but, at 824 per ton, it would increase the cost of wintering to 28 1-2 cents. Last winter a year ago I fed my sheep on corn, cotton seed, bran and hay, and it cost me about 63 cents per head, or two and one-half times as much as it did last winter; and yet they were not half as well fed.

I will take pleasure in explaining in detail several experiments I have made in feeding cotton seed meal dry, both to cattle and sheep, all of which satisfy me that, for producing milk, fat or forming flesh, cotton seed meal has no equal.

ing flesh, cotton seed meal has no equal. E. SHARP.

Meridian, Bosque Co., Texas.

preference is given in that direction, and almost invariably the reason given is that an oily, gummy buck is so much better to cross on the common ewes of the country. cross on the common ewes of the country. Others claim that after using a gummy buck and getting their sheep graded up to the proper standard, they intend to breed for longer wool. Far better would it be to try by breeding to retain every particle of length that is possible, and grade to the required fineness, than to breed back and be obliged to go over the very same ground twice. It is much easier to retrograde in quality of wool than to advance. Short wool and coarse than to advance. Short wool and coarse wool are easily produced, in fact they produce themselves if we but slacken our diligence one particle; try as best we may, some fleeges will be objectionable and some fleeces will be objectionable, and we are constantly obliged to keep turning off and weeding out in order to keep our flocks up to the proper standard. This system of keeping inferior animals when good ones could be equally well kept, and good ones could be equally well kept, and of course with better profit, is very reprehensible; especially so when we remember the many facilities for getting good ewes, and rams. To possess a fairly good stock of ewes and a ram of good dimensions and wool, and of no chance breeding, is to have the first thing needed. But this in itself will not be sufficient if the necessary amount of forethought, energy and intelligence is not forthcoming, and it is often owing to the want of these latter qualifications that so many failures occur. It seems strange that a majority of farmers, after attending a fair and seeing qualifications that so many failures occur. It seems strange that a majority of farmers, after attending a fair and seeing first-class animals of the different breeds, can return home and again pursue the same old process of breeding without one thought of improvement put into successful practice. It seems that the old ruts in which our forefathers traveled have become so habitual to us that we are prone to follow on in the old way until some sudden jar produces an entire revprone to follow on in the old way until some sudden jar produces an entire revolution in our plans and then we are so thoroughly Americanized that we cannot make a gradual change like our more phlegmatic neighbors across the water, but make a pell-mell dive with mayhap both our eyes shut, and no guarantee of a safe landing.—[Cor. Ohio Farmer.

Information Wanted.

he never answered my letter.

1st.—When is the proper time to castrate lambs, and also old rams?

trate lambs, and also old rams?
2d.—Is cotton seed good for sheep?
3d.—Is the grass of the Western prairies, commonly called sage grass, good hay for sheep?
4th —What do you think of sulphur wired with tehens also also because a sheep start of sulphur

4th—What do you think of sulphur mixed with tobacco as a sheep dip?
5th.—What can I do for the scab at this time? it seems too cold to dip.
6th.—What is your opinion of shearing in this climate (same as the north line of

Texas) once or twice a year?

7th.—Can you recommend Mr. Gentry's sheep as being pure blood merinos?

8th.—If I purchase a sheep from him, what is reasonable for the sheep, as he is to be shipped to me?

9th.—About what will 120 Southwest.

I am a subscriber for your much-prized and valuable paper, and expect to con-tinue such as long as I grow stock. Please give me the desired information

Please give me the doublinge in an early number, and oblige J. J. S. Oakland, Indian Territory. Answer.—Ist.—The best time to castrated or corded (which is better) any time when the warder was such as not to admit of their going out. I would then increase the quantity of hay. When kept up all day, or several days at a time, I would, instead of forty bushels, give them 500 to 1,000 bushels of hay, thereby giving to each animal the same bulk of feed each day, whether out on the prairie grazing or kept under cover and the west of the prairie grazing or kept under cover and the weather of their going out. I would instead of forty bushels, give them 500 to 1,000 bushels of hay, thereby giving to each animal the same bulk of feed each day, whether out on the prairie grazing or kept under cover and the patient to cast trate lambs is when they are about a week old; rams may be castrated or cover intended (which is better) any time when the weather about a spossible, all conditions influencing the production or continuance of the disease. The affected animals should be removed to clean, dry ground. When practicable its advisable after the dressing to production or continuance of the disease. The affected animals should Answer.-1st.-The best time to cas-

lambs born—no abortions, no premature births; mothers gave as much milk as the lambs required, and many of them more than the lamb could take; and to-day my lambs are the largest and my ewes the fattest—in fact, my flock is in the best condition. Lever, say a fleck of the lambs are the largest and my ewes the fattest—in fact, my flock is in the lamb could fact that produces the scab is entirely destroyed. No half-way measures will cure the sheep. 6th.—We prefer to have sheep breeders answer this question. 7th.—Mr. Gentry is entirely reliable, and any sheep that he recommends or sells as pure blood merinos will be surely such. 8th.-We believe that Mr. Gentry will not ask more than a fair and reasonable price, taking blood and quality into consideration, for his sheep. 9th.-That depends entirely on the supply and demand. Our market report will show from week to week the prices such stock commands at the stock yards.

THE WOOL MARKET.

Present and Prospective.

Under date of Boston, December 30th, we have the following report respecting the wool market:

The week and the year close with a better feeling in the wool market than has been noticed since the agitation of the tariff question began. The blunders of the commission have been thoroughly exposed and ventilated, and as they in-Difference in Wools.

I feel somewhat like quarreling with the idea that so many have in supposing that a black gummy sheep is a sure incation of its fineness. The idea comes more forcibly to my mind in consequence of hearing so many at our late fair express their minds in that direction. One would suppose that a few ounces of the article that is sure to bring a discount when we sell our wood suddenly becomes valuable when looking at the sheep. Even awarding committees very generally are guilty of this weakness, and you are very sure of seeing the flutter of a red ribbon in their wake, lodged near the abiding place of the blackest sheep on the ground. I have taken some pains to ascertain some of the reasons why their preference is given in that direction, and a further decline, and freely predict a 37 to 38c market for fine Ohio, and 35c market for fine Michigan fleece.

The judgment of some of these gentle-

men is entitled to respect, but in the present case weare obliged to differ from them. We believe prices have touched bottom, and in the absence of any unusual event, we expect to see our present quotations fully sustained hereafter. are not predicting an advance, but we warn such buyers as are looking for fur-ther important concessions that they may be disappointed; and in their interest, as well as that of owners of wool, we hope

WEEK CLOSING JANUARY 6TH.

The new year opens with a better feeling in the wool market than has been noted for several months. We are not able to report any advance in prices, but they are less irregular under an improved demand. We repeat our views as stated by us last week, when we said, "We believe wice hever traybed better new the bestern week." lieve prices have touched bottom, and in the absence of any unusual event, we expect to see our present quotations fully sustained hereafter."

Sales reported by Advertiser: Domestic, 2,702,000 pounds; foreign, 40,000 pounds.

Sales reported by Journal: Domestic 2.854,500 pounds; foreign, 40,000 pounds. An analysis of the latter shows the sales to consist of 1,275,700 pounds of washed; 1,098,700 pounds of unwashed; 80,400 pounds of scoured; 399,700 pounds

An eminent English authority recommends the following treatment for foot rot in sheep: The earliest appearance of lameness should be followed by an immediate examination of the feet. All dirt, foreign bodies and detached horn should be carefully removed—carefully, so far as the latter is concerned, because I am of opinion there is entirely too much indiscriminate use of the knife practiced, diseased and sound horn alike being often randomly removed. Having pared away all detached horn, the exposed parts are to be dressed with a suitable agent. Those which have found most favor are: Sulphate of copper, nitrate of silver, cre-Col. N. J. Colman: I am much in need of information on a number of matters, and hope through the columns of your valuable paper to get it. I wrote to R. M. Bell last August for the same, but crude carbolic acid, one-half ounce; to be well mixed and applied with a feather. Where the horn in soft and spongy and the discharge acrid, Finlay Dun recomthe discharge acrid, Finlay Dun recommends as a useful dressing an ounce each of cresore, turpentine and linseed oil, and in the absence of the first two ingredients (creosote has similar action to carbolic acid) in the formula I have given it will be found exceedingly beneficial. The same authority further advises, when the interdigital skin becomes involved, the dusting of it daily with powdered oxide of zinc or sulphate of copper, or the gentle application of nitrate of silver, a line of treatment in which I also fully agree. When the bones, tendons, ligaments and joints become involved, treatment applicable to these conditions must be adopted cable to these conditions must be adopted on surgical principles. In such cases, Fleming observes: "It may be necessary to remove the whole of the hoof; and where there is necessis, caries and ulceration of the joints, which do not yield to any of the measures adopted, amputation of the affected phalanges may be resorted to, and with success when only one foot is involved. A valuable ram or ewe may in this way be saved, and its aptitude may in this way be saved, and its aptitude for breeding purposes be but little impaired. The end of the limb, after the amputation, is covered with a thick cicatrice of a horney nature, and it is only exceptionally that it meets the ground; the animal traveling short distances and grazing very well on three legs. Collateral treatment consists in avoiding, so far as possible all conditions intured in the

Che Pig Pen.

Raising Family Pork on a Small Farm.

For the benefit of "small" farmers who read the Rural. I here give my method of raising pork for family use: In the first place, I have a tight floor in my barn, and when feeding my stock I shake the dust out of the hay as well as the seeds and clover leaves and blossoms, sweeping them all up once a day to prevent them being soiled by unclean boots when I am feeding the stock. When regathered I put them in a tub or pork half-barrel in the yard near the kitchen door, and as the cooking stove has fire in it all day now, I can always get a kettle of hot water to pour over the stuff, which is at once covered. I fed three pigs from October, 1881, till September I, in the following way: I fill a patent pail with hay seed, leaves and clover blossoms; with this stuff I mix three pounds of wheat middlings three times a day for my three pigs, giving them a pailful of water each time, if there is no slop in the slop barrels. This feed will winter three pigs in good order, and if they get good slops from the house and have a warm pen to sleep in, they will generally be too fat for breeding purposes. In summer I let them run on grass, but they are fed the usual amount of middlings and have the customary For the benefit of "small" farmers who poses. In summer I set them run of grass, but they are fed the usual amount of middlings and have the customary quantity of water or slop to drink. In September I feed green sweet corn, and in October I give them shelled corn and the middlings as usual. Here is my pig account for one year:

October 1, 1881, to 3 young pigs, at \$3......\$ 9 00

12 bushels of shelled corn, at 85c.. 10 20 Total......\$68 40

Total......897 50 Hereabouts the manure is the only pay allowed farmers for keeping hogs, and so far as the amount and quality of the manure are concerned, I get as good pay as any of my neighbors and the \$29 10 for the refuse from my barn. Had I separated my sows in time last spring I would probably have four more pigs to sell. As it was, they were dropped out of doors during a cold night, and as there

The Poultry Pard.

were two sows on the place, the young things were found dead in the morning.

Periods of Incubation

The period of incubation or time re-quired in which birds sit on their eggs used hatched varies in before the young are hatched varies in different species, as follows: Humming bird, 12 days; canary bird

80,400 pounds of scoured; 399,700 pounds of pulled and noils; 10,000 pounds of carpet wool.

ape, and 30,000 pounds of carpet wool.

Foot Rot in Sheep.

An eminent English authority recommends the following treatment for foot temperature necessary for the development of the young bird—some put it at 104 degrees, others at 140 degrees Fahr. The chick of the common fowl on the fourth day of incubation attains the length of about one-third of an inch; and then what appear to be voluntary motions are first observed. Ossification, or the process of forming bone, commences on the ninth day. Feathers appear on the fourteenth day, and if taken out of the shell the chich can open its mouth; and about the nineteenth day, the air-vessel at the large extremity of the egg is ruptured and breathing begins.

Try Poultry Raising on the Farm Again.

The ever genial and clever Phil. Thrifton, too modest to use his own good name, thus discourses on this subject in the Western Rural:

The investigations regarding the cause and nature of chicken cholera, made by the Department of Agriculture at Washington, have not been without good results. From experiments made it has been found that the germs of this disease are taken into the body with the food and drink and seldom if ever with the air inspired; that the ground on which diseased fowls are kept becomes infected with the virus from the excrements of the fowls; also that a one-half per cent. solution of sulphuric acid will destroy the germs. These are not the only facts brought out by these investigations, but they are enough, if intelligently acted upon, to make poultry raising a much safer business than it has been of late

years.

If their highest happiness is to "scratch," and it is, thought best that they be indulged in this, turn them into the field, or even the vegetable or flower garden, where they can have fresh ground in which to amuse themselves; but never have them range and scratch and eat on the same ground. and scratch and eat on the same ground.

The almost universal practice is to throw the food for poultry on the ground. In this way the fowls take up more or less dirt, and with it, if present, the germs of disease. As a preventive of the introduction or spread of the disease in this way, the foulth but he will be such as the food of the disease in this way. this way, the fowls should always have their food and water supplied them from clean vessels. Even dry grain, as corn, or wheat, should be given them in small boxes or troughs, from which they can pick the feed but cannot tramp it with

pick the feed but cannot tramp it with their soiled feet.

The other point off interest and to be remembered is that should the disease make itsappearance it may be checked and finally banished by the use of sulphuric acid. The floor of the poultry house, after being cleaned, should be well showered with the solution from the bulk of feed each day, whether out on that question. 4th.—Used in proper prothe prairie grazing or kept under cover all day.

The result of this mode of feeding may be briefly stated as follows: Out of 1,000 head I lost, from the 1st of December to the 20th of March, two matured sheep, and on that day I had 95 per cent. of all phuric acid. One pint of dry copperas

dissolved in two gallons of water will be found strong enough, and I am not sure but a solution of less strength would answer as well.

would answer as well.

It is remarkable that eggs should be selling at this time of the year. In Central Illinois, at thirty cents per dozen, and young chickens at thirty-five to forty-five cents each. Such prices indicate the scarcity of poultry and eggs, and this in turn shows to what an extent discouragement in this line of industry has reached.

With the better knowledge now had of With the better knowledge now had of this malady known as chicken cholera, there seems to be no reason why the rearing of poultry should not again become a profitable business, even at prices far below those above mentioned. Poultry products on the farm should be more abundant, and could be, without doubt, were the extra care in management above indicated more generally practiced.

Of the many thousands of poultry keepers in the country only a few have hens that lay in winter. This if not a fault, is at least a misfortune. Eggs are nice to have in cold weather either to sell or to keep, but especially to sell. There is no difficulty about it if you go at it right. Treat the hens decently, give them comfortable quarters, and feed them well and they will lay. If it should happen that under fair treatment they refuse to respond, they are a bad lot, and need to be suppressed and their places taken by a more appreciative set. Of the many thousands of poultry eepers in the country only a few have places taken by a more appreciative set.

When turkeys are not two months old they can successfully withstand the severest weather if dry. In wet weather they should be confined in a yard under Fifty fowls will make, in their roosting

house alone, from 7 cwt. to 10 cwt. per annum of dry manure and poltry manure is richer than guano in ammonia and fertilizing salts. No orher stock will give an equal return in this way.

If you want the hens to attend strictly If you want the hens to attend strictly to business in the way of egg-production give them a chance. Warm breakfasts, clean water, broken oyster shells, some sheaf oats or wheat, some thick milk into which good bran is stirred, some cabbage or other green stuff, comfortable, home-like roosting and laying apartments, a square meal of whole corn in the evening—and then see if they are not industrious and diligent in business.

ADVERTISEMENTS.

No Whiskey!

Brown's Iron BITTERS is one of the very few tonic medicines that are not composed mostly of alcohol or whiskey, thus becoming a fruitful source of intemperance by promoting a desire for rum.

Brown's Iron BITTERS is guaranteed to be a nonintoxicating stimulant, and it will, in nearly every case, take the place of all liquor, and at the same time absolutely kill the desire for whiskey and other intoxicating beverages.

Rev. G. W. RICE, editor of the American Christian Review, says of Brown's Iron Bitters:

Cin., O., Nov. 16, 1881. ing of vital force in business, pleasure, and vicious indul-gence of our people, makes your preparation a necessity; and if applied, will save hun-dreds who resort to saloons for temporary recuperation.

Brown's Iron BITTERS has been thoroughly tested for dyspepsia, indigestion, biliousness, weakness, debility, overwork, rheumatism, neuralgia, consumption, liver complaints, kidney troubles, &c., and it never fails to render speedy and permanent relief.

HALL'S Vegetable Sicilian

HAIR RENEWER

was the first preparation perfectly adapted to cure diseases of the scalp, and the first successful restorer of faded or gray hair to its natural color, growth, and youthful beauty. It has had many mitators, but none have so fully met all the requirements needful for the proper treatment of the hair and scalp. HALL'S HAIR RENEWER has steadily grown in favor, and spread its fame and usefulness to every quarter of the globe. Its unparalleled success can be attributed to but one canse: the entire fulfilment of its promises. He entire fulfilment of its promises. He entire fulfilment of the promises are successed in the support of th

Buckingham's Dye

FOR THE WHISKERS

R. P. HALL & CO., Mashua, N. H. Sold by all Dealers in Medicines.

ADVERTISEMENTS.

KIDNEY-WORT FOR THE PERMANENT CURE OF CONSTIPATION. PRIOR \$1. USE Druggists Sell KIDNEY-WORT

AN OFFER TO FARMERS.

I have invented a Self-supporting Board Fence; needs no posts, can be made in the barn on rainy days; costs 30 cts as rod less than post and board fence. It is not patented but for 30 cents I will send Illustrated Fence Treatise, telling how to make it, and one of the following premiums: 1st, a one-foot boxwood, pocket rule. 2d, Kendall's Horse Book, 100 pages, 35 illustrations. 3d, one package of Sugar Trough Gourd, Acme Tomato, Prize Head Lettuce, Verbena and Phlox, or all the above for 60 cts. Address, WALDO F. BROWN, Box 75, Oxford, Ohio.

SPRING

Are now used by thousands all over the country with the greatest satisfaction. They wear longer and ride easier, and bear a greater and more sudden strain and are better adapted to the country, as well as city roads, than any other. They are manufactured by all carriage builders. Address, HENRY TIMKIN, Patentee, St. Louis, Mo.



Pulverizing Harrow, Clod Crusher & Leveler



The "ACME" subjects the soil to the actions of a Crusher and Leveler, and to the Cutting. Lifting, Turning process of double rows of STEEL COLLTEERs, the peculiar shape and arrangement of which give immense cutting power. Thus the three operations consisting lumps, leveling off the three operations of the colling lumps, leveling off the colling lumps, leveling lumps, lumps, lumps, lumps, lumps, lumps, lumps, lumps, lum

FAIR PLAY.

If your dealer does not keep the "ACME" for sale, don't let him palm off an inferior tool on you gasuring you that he has something better, but SATISFY YOURSELF by ordering one ON TRIAL. We will send it on trial, and if it does not suit, you may send it back, we paying return freight charges. We don't ask for money or Note natil after you have tried it on your own farm.

Send for? Pannablet

Send for Pamphlet containing Hundreds of Testimonials from 44 different States and Territories.

NASH & BROTHER, Manufactory and Principal Office,

Brauch Office, HARRISBURG, PA. MILLINGTON, New Jersey. N. B.—Pamphlet entitled "TILLAGE IS MANURE" will also be sent to parties who name this paper.

THOMAS Smoothing Harrow.

-It carried of the-

HIGHEST PREMIUM Over all competitors at the great Centennia

exhibition.
The best harrow for pulverizing the ground.
The best harrow for preparing the soil for
grass or other seeds.
The best harrow for covering seed.
The best harrow for cultivating winter wheat
in the spring, adding largely to the yield.
The best harrow for cultivating young cornsorghum or potatoes, as it thoroughly destroys the weeds and does not tear out the
plants.

stroys the weeds and does not tear out the plants.

The teeth being made of solid steel are slanting backwards, and thus never clogging, do not tear up corn, cane or potato plants, but destroys all light-rooted weads.

Every farmer should have it. Send for illustrated circular to the manufacturer's southwestern agent, CHAS. E. PRUNTY, Proceeding Grain and Grass Seeds. No. 7 North

Dealer in Grain and Grass Seeds, No. 7 North. Main St., St. Louis, Mo. Fishing Nets,

FISHING TACKLE. Trammell, Hoop and Bird Nets always or hand. Send for Price List.

C. & F. CHENOT, No. 324 SOUTH MAIN ST., ST. LOUIS, MO.

JOHNSON'S ANODYNE LINIMENT.

For Internal and External use. Cures neuralgia, Diphtheria, Croup, Asthma, Bronchitis, Influenza, Sore Lungs, Bleeding at the Lungs, Chronic Hoarseness, Hacking Cough, Whooping Cough, Chronic Rheumatism, Chronic Dysentery, Cholera Morbus, Kidney Troubles, Diseases of the Spine and Lame Back. Send for pamphlet.

I. S. JOHNSON & CO., Boston, Mass.

Situation Wanted by an unmarried man keeping all kinds of stock, in England and America, who is sober, industrious and not afraid of work. Is competent to take charge of a stock farm, and to attend to the breeding and management of all kinds of live stock to the entire satisfaction of his employer. Can give good references. Address, "Foreman," care RURAL WORLD, St. Louis.



\$225 A MONTH-AGENTS WANTED-90 best selling articles in the world; I sample Address Jay Bronson, Detroit, Mich \$72 A WEEK, \$12 a day at home easily made. Costly Outfit free. Address Taux & Co., Augusta, Me. has the

100 ha fai is: rie is pr su

tic no m

th qu

pr go ha

RE OF

MERS.

ng Board ade in the rod less patented ted Fence end one of foot box-rse Book, ackage of tto, Prize or all the BROWN,

HCLES

the coun-hey wear eater and adapted than any carriage IKIN, nis, Mo.

outh LLS foal for

larrow, Leveler.

f crush-f crush-nd, and erform-f Spikes rubbish... sod and rly fail; he only the en-

g return or Note Hun-dif-R,

UM tennial

eel are-ogging, plants,

for il-turer's NTY,

North

ts,

ays on

s, MO.

IT.

eural-chitis, Lungs, 'hoop-hronic bubles, Send O., Iass.

Mr. Hopkins read a paper on Straw berries, in which he stated the good points of an ideal variety to be: 1sthardiness; 2d-productiveness; 3d-size; 4th-quality. He said that the model variety had not been discovered, but that of many varieties that he had grown he preferred the following, and in the order named, viz: Chas. Downing, Miner's Prolific, Windsor Chief.

Mr. Underwood and others discussed the sweet potato question at some length, the general experience being that with careful handling so as to avoid all bruis-ing, there was very little trouble in wintering the potatoes in any ordinary cel-

Mr. P. M. Kiely, of St. Louis, gave the following as a list of peaches which he had found most profitable as market sorts for the St. Louis market, for Missouri farmers: Alexander, Early Rivers, Crawford's early, Crawford's late, Foster, Ward's late, Old Mixon Free, Newington Cling, Morris' White, September Queen, La Grange, Nanticoke, Heath, Steadley, Geary's Hold-on.

Several members thought that Smock should be added.

F. S. Earle, of Cobden, Ill., read an exceedingly interesting paper on "Parasitic Fungi." Engravings of the illustrations used are now being prepared, and as soon as they are completed we shall publish the paper in full in the RURAL

Mr. Holsinger gave an excellent talk on the urgent necessity of fruit-growers giving more attention to the prevention of insect ravages, believing prevention better than care.

Mr. Slichter, of Kansas, read a paper on Forestry, in which he took a very roseate view of the immense profits of treegrowing in Kansas, and was followed by Hon. F. P. Baker, United States Commissioner, who lamented (the growing scarcity of timber throughout the West, and urged the establishment of government forests and forest schools.

The exhibition of fruit was remarkably fine, nearly every specimen on the tables being free from any blemish. At the

good lively warm and dry soil, it must have good cultivation, especially during a dry season, and, above all, it must be pruned short. As it is apt to overbear with long pruning, it is best to plant it about 5 by 5 feet, and train it to stakes and

missouri Horticultural.

The Twenty-sixth Annual Meeting of the Missouri State Horticultural Society was held in the Merchants' Exchange rooms, in Kansas City, on December 19-22.

The exhibits of fruits were unusually fine, the papers and discussions very interesting, and, taken altogether, this was one of the best meetings the Society has had for some years.

Mr. Hopkins read a paper on Straw
Mr. Hopkins read a paper on Straw
ment it is one of the, if not the, safest to plant. It is one of those few varieties that is never affected by rot, and its excellent quality will always insure for it the highest market price. It has one more point in its favor; it will endure more handling than any other grape we have, its tough skin, small berries and campact bunch, is just what is needed in a grape to come out bright after it has been shipped a long distance, or has been held by the dealer for several days, or a week. I have seen plates of it go through two fairs of one week's duration each, and at the end it looked the brighest of some forty varieties. Much is promised us of a seedling of the good oil variety, the Beatty and the same of the its one of the, if not the, safest to plant. It is one of those few varieties that is one of the, if not the, safest to plant. It is one of the, if not the, safest to plant. It is one of the, if not the, safest to plant. It is one of these in the plant. It is one of those in the plant. It is one of these in the plant. It is on bunch and berry, also a stronger grower

Beanty. It is said to be inden larger than its parent.

A number of good seedlings have been produced here in the West from the Taylor. The Elvira is one of the oldest, very productive, and hardy, but its tender skin will ever keep it from becoming a profitable market grape. Missouri Riesling, Grim's Golden, and a few other Taylor seedlings produced by Mr. Grim are highly promising. It is indeed from American sorts that we must expect to raise seedlings which will be equal in quality for the table and wine to the best European grapes, and the Taylor, as worthless as it is, may yet become one of the great-grand-parents of some of our best American grapes.

The Concord is yet, and will be for some time to come, the grape for the million,

The Concord is yet, and will be for some time to come, the grape for the million, but the desire for something better in quality, with the vigor of this fine grape, has induced many to produce seedlings therefrom. Thus we have the Triumph, Martha, Lady, Worden, Early Victor, Moore's Early, Pocklington and others, nearly all hardy and vigorous as well as productive. The Concord is also one of the parents of some very valuable hybrids, of these twe have: Lady Washington, Eldorado, Jefferson, Niagara and Highland.

Of the latest varieties the Norton and Cynthiana are some of the best black

This subject is creating some discussion in Southern Illinois. Our practice has been to plant 20 feet apart, and after 30 years experience we would not plant closer. A writer in the Farmer and Fruit from top to bottom. Grower says that he has found by talking with peach growers in his vicinity that it is pretty generally conceeded that 20 feet is near enough, and close planting is not profitable; not a few of the most successful advocate 22 feet on good, strong ful advocate 22 feet on good, strong ground. The peach growers on the Lower Hudson, Jersey, Delaware and Maryland plant close, we admit, and are in a measure successful, but we cannot attribute their success to their mode of planting, but rather to their climatic influences, thorough cultivation and manner of trimming. They do not get such a large growth in orchard or nursery as we do. Not a few of the Eastern growers contend that by giving the trees more we do. Not a few of the Eastern growers contend that by giving the trees more room, they raise better peaches and of course obtain better prices, especially in seasons of protracted drouth. This also is the experience of most all the Western growers that have written on this subject, some of them may of 25 years are street.

ance with my own experience and observation. I therefore settled upon 22 feets a good distance, and do not expect to regret planting that distance. I am fully attitude on our more where to plant grapes. It has also proved again in what varieties the most money is made. The late frosts in spring reached the tineyards on low lands, as well as only partially low. Only the highest hillsides and risk gescaped the frosts altogether.

Those highest hillsides are also more free from rot and mildew than the lower Jocations. Distance of planting, too. has a good deal to do with success in spring round with a wagon to gather up violations. Distance of planting, too, thas one may be treated the provided of the provided o

Pruning Evergreens.

A moderate pruning or shortening back may be given late in summer after the terminal buds have formed, the pruned branches thickening and becoming hard-ened by slight growth. If done much later, the trees will be rendered somewhat tenderer and not endure winter so well. Heavy pruning, when required, is per-formed to best advantage in spring, just as growth is commencing. Any time in the growing season the shoots may be pinched back for securing a compact and symmetrical form. These rules apply to hardy, free-growing evergreens.

Fence Posts that Will Last.

A writer in an exchange says: I discovered many years ago that wood could be made to last longer than iron in the ground, but thought the process so simple ground, but thought the process so simple that it was not well to make a stir about it. I would as soon have poplar, basswood or ash as any other kind of timber for fence posts. I have taken out basswood posts after having been set seven years that were as sound when taken out as when first put in the ground. Time and weather seemed to have no effect on them. The posts can be prepared for less than two cents a piece. This is the rethan two cents a piece. This is the re-cipe: Take boiled linseed oil and stir in cipe: Take boiled linseed oil and stri pulverized coal to the consistency paint. Put a coat of this over the ti er, and there is not a man that will live

Whitewash and Limewash.

Before you whitewash a wall, wash it well with a brush and clean water. To make whitewash, put some whiting into a basin, pour water on it, mixed them up well, wait till the whiting has all sunk to the bottom, and then pour the water away. Repeat this two or three times, if Moore's Early, Pocklington and others, nearly all hardy and vigorous as well as productive. The Concord is also one of the parents of some very valuable hybrids, of these twe have: Lady Washington, Eldorado, Jefferson, Niagara and Highland.

Of the latest varieties the Norton and Cynthiana are some of the best black varieties, and Goethe the best of all the late for table and wine.

The above essay was read at the late meeting of the Missouri State Horticultural Society.

How Far Apart to Plant Fruit Trees.

This subject is creating some discussioned way. Repeat this two or three times, if you want your whitewash to ea good olor, and not to have a dirty yellow tinge when on the wall. Then mix the cleaned whiting with water into a mike fluid, and add a little melted size or dissolved glue, also a small quantity of "powder blue." The more size you add the less will the whitewash when dry "rub off" on the clothes. The blue is added to correct the yellow tinge when on the wall. Then mix the cleaned whiting with water into a mike fluid, and add a little melted size or dissolved glue, also a small quantity of "powder blue." The more size you add the less will the whitewash when dry "rub off" on the clothes. The blue is added to correct the yellow tinge when on the wall. Then mix the clour, and to to have a dirty yellow tinge when on the wall. Then mix the clour, and to to have a dirty yellow tinge when on the wall. Then mix the cleaned whiting with water into a mike fluid, and add a little melted size or dissolved glue, also a small quantity of "powder blue." The more size you add the less will the whitewash when dry "prub off" on the clothes. The blue is added to correct the yellow tinge when on the wall. Then mix the cleaned whiting with water into a mike fluid, and add a little melted size or dissolved glue, also a small quantity of "powder blue." The more size you add the less will the whitewash when dry "prub off" on the clothes. The blue is added to correct the yellow tinge when on the wall. Then mix the polor, putting on either whitewash or linewash always draw your broad, flat brush in the same direction, that is, if at starting you move it from east to west, do not afterward move it from north to south or

> The experiments were made on the apple and pear. A vigorous apple tree, eight or ten years old, which had searcely made any fruit buds, has done best when about half the roots were cut in one season and half three years later, by go-ing half way round on opposite sides in one year and finishing at the next prun-ing, working two feet underneath to sev-er downward roots. It has always ans-wered well also to cut from such trees all the larger and longer roots about two and a half feet from the stem, leaving the smaller and weaker ones longer and go-ing half way round, as already stated. The operation was repeated three or four years later by extending the cut circle a

center of the sloped face of the stock, downward, and another in the slope of the scion upward; this, if carefully done, leaves a tongue-like strip on each face, and they are to be slipped together, so that the smooth face of the scion touches that of the stock and both are bound together by the cuts made. Tie with strips of cloth covered with melted tallow and beeswax. Every part of the cut surface of cloth covered with melted tallow and beeswax. Every part of the cut surface when exposed to the air and light must be covered with these cloth strips, which are pressed and an impervious covering made. There is a modification of this system of grafting in which, if the stock is much larger than the scion, the cut in the stock is made of only the width of the scion.

Another variation of this system con-Another variation of this system consists in side-grafting, which is performed on the side of a stock without cutting the entire head off. If a valuable tree has lost a branch from any accident, a side-graft put in will soon supply the deficiency. This is of particular advantage in the case of ornamental trees on a lawn, where a branch blown off by the wind often spoils the looks of a tree unless some, sneedy, method of prestration less some speedy method of restoration is adopted. In such a case you are to select the spot where you wish the new branch to start from, pare off the bark and a little wood, cut the scion to fit, and wrap closely.

Truck Gardening.

Truck Gardening.

The advantages to be derived from the cultivation of early vegetables and fruits are just beginning to be appreciated by the South. Louisiana, we are sorry to say, has not profited by these crops as fully as her sisters. Tangipahoa, it is true, has been shipping some early fruit North, and the river parishes have made some money in potatoes and onions; but we have not yet made as much out of our rich soil and soft climate in this respect as we might.

rich soil and soft climate in this respect as we might.
Virginia, the two Carolinas and Florida have, so fatr, profited most by this new industry. This cultivation of early veg-etables in the South has resulted in a complete change in the Northern markets, and the seasons for vegetables and fruit there have greatly altered. Strawberries formerly came in June in New York, and tomatoes about July. Tomatoes to-day appear on the streets of that metropolis in February, coming from Bermuda; Florada tomatoes soon follow; then Georgia, and so on northward, unthen Georgia, and so on northward, un-til the New Jersey and Long Island crops are finally reached.

Of the wonderful profits of truck farm-

of the wonderful profits of track farming in the South much has been said, but volumes yet remain untold. A strawberry farm near Charleston has been found to yield a better harvest than a cotton plantation, and a Georgia farmer now makes a fine living from a lot of

asparagus. This truck farming experiment is being supplemented in Tennessee by fruit dry-ing—a brand new industry. Chattanooga, ing—a brand new industry. Chattanooga, Tenm., which two years ago did not ship a pound of dried fruit, has already shipped 720,000 pounds this year, and this new industry being found very profitable, is, of course, growing rapidly.

Such are the discoveries made by our sister States of the South. Louisiana. unfortunately, is utilizing very little of her rich lands in raising these minor, but paying crops.

paying crops.

carly every step blooding. At the order the second point of the meeting a committive was appelled to the second point of the s Storing Potatoes.

There are three methods of storing potatoes in general use, each of which

The Chicago Grocer contains the following:

A few years ago the amount of dried fruit shipped from the South was scarce-properties.

Notes Upon Grafting.

The time was when few persons understood about grafting trees. It was rather a mysterious art and generally some person in each neighborhood did all the grafting that was required. But since the agricultural journals began to illustrate with pen and pencil the practical operations of horticulture, every farmer's son can, if he will, change the tops of an old orchard or start a new one, as he chooses. Each year, however, there are some who wish to practice this ancient as some timely and available.

The proper season for grafting is in the spring, when the sap is beginning in messential particulars. The requisite is tock, and they should be kept in close contact till the union is complete. In some ways grafting is more troublesome tank the inner bark of the scion shall exactly unite with the inner bark of the scion shall exactly unite with the inner bark of the scion shall exactly unite with the inner bark of the scion shall exactly unite with the inner bark of the scion shall exactly unite with the inner bark of the scion shall exactly unite with the inner bark of the scion shall exactly unite with the inner bark of the scion shall exactly unite with the inner bark of the contact till the union is complete. In some ways grafting is more troublesome tracticable, but griefs in grafting is preferred for orchard work.

On small trees where stock and scion are of nearly the same size, whip or one way grafting is usually depressive the same size, whip or one ways grafting is usually the method in the production hardly the same size, whip or one ways grafting is usually the method in the production hardly the production hardly the same size, whip or one hardly the s

In Mr. Riehl's letter "Notes on a Trip South" published in our issue of the 4th inst., the types made him say "I saw corn in wheat stubble looking well, and saw enough all through the South as far as I went to know it will do well if sown." Instead of corn read clover.

A small charge of dynamite will split the toughest roots into pieces that can be conveniently handled. Bore a hole nearly through the solid part of the root, insert the fuse in a cap and put it down to the bottom. The fuse burns at the rate of about a foot a minute, giving with a little calculation ample time for the operator to get out of the way.

The best results from wood ashes are The best results from wood ashes are secured by adding a small proportion of common salt. Ashes contain all the mineral elements of the plant, and they exert a good influence in unlocking fertility that would not be otherwise available. In burning anything the chlorine it contains is carried off with the smoke, and salt, chloride of sodium, supplies the deficiency.

Intelligent orchardists discovered the Intelligent orchardists discovered the advantages many years ago of fertilizing the ground in apple orchards by top-dressing with yard or stable manure. We have seen old trees, partly dying and pronounced entirely superannuated, so far recovered by copious and broad top-dressing as to give again good and heavy crops. At a late meeting of the Dayton Horticulturul society, Mr. Waymire stated that he had five bellitower trees remarkable for their unfruiffulness. He heavily manured four of them, and from these he had good crops. The fifth, which was not manured, bore next to nothing.

Experience is modifying the views of many potato growers who have heretofore favored cutting the seed very fine.
Years ago one or two eyes in a hill invariably produced an abundance of
sprouts and a large crop of full-sized
potatoes. More seed produced a large
number of very small tubers unfit for
marketing. Now so large a portion of
the seed is defective that there are often
not more than one or two eves on a potato not more than one or two eyes on a potato capable of making vigorous plants. Plant-ing the whole potato is therefore coming in vogue, and unless great care is taken in selecting the potatoes there will be many missed or an outcome of poor hills.

ADVERTISEMENTS.

LINCOLN READS A POEM.

HONEST OLD ABE ENTERTAINS HIS CABINET WITH A LITTLE QUOTATION. "Now, gentlemen, you all have more or less poetry in your souls; listen to this," and Abra-"Now, gentelies, year and the poetry in your souls; listen to this," and Abraham Lincoln, then President, rose from his chair, in his office in the White House, and read, in trembling tones, which indicated his own profound appreciation of it, Dr. O. W. Holmes' "Last Leaf," of which the following are two verses:

"They say that in his prime,
Ere the pruning knife of time
Cut him down;
Not a better man was found
By the crier in his round
Through the town.

Through the town.

Now the mossy marbles rest
On the lips that he had pressed
In their bloom;
And the names he loved to he ar
Have been carved for many a year
On the tomb."

Mr. Michael Gnilfoyle, of Binghamton, N. Y.,
is not as old as the venerable Boston citizen
of whom the poet wrote with such tender
pathos, yet he is more than three score and
ten. "For the past eight of those years," he
writes, "I have been a perfect cripple from
rheumatism, hobbling about the best I could
with my cane. I took PARKER'S GINGER
TONIC, and am now supple and strong as a gymnast. There is no trace of the disease left about
me."



Holman's Pad ACTS BY ABSORPTION THEOUGH THE Nerve Forces THE CIRCULATION.

The only true Malarial Antidote. It is the only known remedy that positively expel-very vestige of Malarial taint from the blood with the use of poisonous drugs. It is a possitive Preventive and Gure-temedy foan's Stomach and Liver Pad is a Sovereign temedy foan's Stomach and Liver Pad is a Sovereign

CHILLS AND FEVER, And every other form of Malaria, all Stomach and Liver Troubles, Nervous and Sick Headaches, Chronic Diarrham, Children's Diseases, 12 and 12 HOLMAN PAD CO.,

744 Breadway, New York. Box 2119.

ADVERTISEMENTS.

DARBYS Prophylactic Fluid.

For the prevention and treatment of Dipth theria, Scarlet Fever, Small Pox, Yellow Fever Malaria, etc. of the Fluid will do more to ar-rest and cure these diseases than any known

DARBYS PROPHYLACTIC FLUID,

and epidemic.

Also, as a Gargle for the Throat. As a Wash for the Persen; And as a Disinfectant for the House.

A CERTAIN REMEDY AGAINST ALL CONTAGIOUS DISEASES.

It neutralizes at once all noxious odors and gases. Destroys the germs of disease and septic (putrescent) floating imperceptible in the air, or such as have effected a lodgement in the throat or on the person.

A certain remedy against all contagious cases.

ases. Perfectly Harmless, used Externally or In-

J. H. ZELIN & CO., Proprietors. MANUFACTURING CHEMISTS, PHILA. Price, 50c per bottle; pint bottles, \$1.

A NOTED BUT UNTITLED WOMAN.



Mesers, Editors:— The above is a good likeness of Mrs. Lydia E. Pink-bam, of Lynn, Mass., who above all other human beings may be truthfully called the "Dear Friend of Woman," as some of her correspondents love to call her. She is sealously devoted to her work, which is the outcome

may be truthfully called the 'Dear Friend of Woman,' as some of her correspondents love to call her. She is assloualy devoted to her work, which is the outcome of a life-study, and is obliged to keep six lady assistants, to help her answer the large correspondence which daily pours in upon her, cach bearing its special purden of suffering, or joy at release from it. Her Vegetable Compound is a medicine for good and not will purpose. I have personally investigated it and am satisfied of the truth of this.

On account of its proven merita, it is recommended and prescribed by the best physicians in the country. One says: "It works like a charm and saves much pain. It will cure entirely the worst form of falling of the uterus, Leucarthona, irregular and paintul Menstruation, all Ovarian Troubles, Indiammation and Ulceration, Floodings, all Displacements and the consequent spinal weakness, and is especially adapted to the Change of Liffe."

It permeates overy portion of the system, and gives new life and vigor. It removes faintness, fastulency, destroys all craving for stimulants, and relieves weakness of the stomach. It cures Bloating, Headaches, Nervous Prostration, General Debility, Sleeplessness, Depression and Indigestion. That feeling of bearing down, causing pain, weight and backache, is always permanently cured by its use. It will at all times, all the land the names of many who have been restored to perfect health by the use of the Vegetable Compound, can be obtained by addressing Mrs. P., with stamp for reply, at her home in Lynn, Mass.

For Kidney Complaint of either sex this compound is unsurpassed as abundant testimonials show.

"Mrs. Pinkham's Liver Pills," says one writer, "are the best in the world for the cure of Constipation, Billousness and Torpidity of the liver. Her Blood Purlifier works wonders in fits special in line and bids fair to equal the Compound in its popularity.

All must respect her as an Angel of Mercy whose sole ambition is to do good to others.





U. S. Wind Eng. & Pump Co., Batavia, Ill.

THE SOUTH AND SOUTHEAST.

SHOULD YOU CONTEMPLATE A TRIP to Nashville, Chattanooga, Atlanta, Charleston, S. C.; Savannah, Ga.; Jacksonville, Fla., or in fact any point in the South or Southeast, it will be to your interest to examine the advantages over all other lines offered by the St. Louis, Iron Mountain & Southern Railway—"from Mountain Route"—in the way of Fast Time. Elegant Equipment, etc.

etc. At present a Daily Train is run from Saint Louis Grand Union Depot, attached to which will be found an elegant Pullman Palace Sleeping Car, which runs through to Nashville, Tenn., where direct connections are made with Express Trains of connecting lines for points mentioned above. This Train connects at Nashville with the Jacksonville Express, having a Pullman Palace Sleeping Car of the very finest make attached, which runs through to Jacksonville, Florida, without change.

For further information, address B. KINNAN,
Ass't Gen'l Pass. Ag't,
St. Louis.

F. CHANDLER,
Gen'l Pass. Ag't,
St. Louis.

AGENTS WAN LED EVERYWHERE to see the best Family Rait-ting Machine ever in rente will have a pair of stockings with HEEL at a real variety of famour for which there is always are advanted, of famour for which there is always are advantate, Send for circular and terms to the Twomably Knitting Machine Co., 163 Trament Street, Boston, Mass.

\$66 a week in your own town. Terms and \$5 outfit \$5 to \$20 per day at home. Samples worth \$5 free. Address H. Hallet & Co., Portland, Me.

man jars Ho and Th time of th duty will

COLMAN'S RURAL WORLD.

BY NORMAN J. COLMAN.

PUBLISHED WEEKLY AT

ONE DOLLAR PER YEAR.

ADVERTISING: 25 cents per line of space; reuction on large or long time advertisements.

Address NORMAN J. COLMAN, Publisher, 600 Olive Street, St. Louis, Mo.

(Advertisers will find the RURAL WORLD one of the best advertising mediums of its class in the country. This is the uniform testimony of all who have given it a trial. Many of our largest advertising patrons have used it for more than a quarter of a century, which is the highest possible recommendation of its value as an advertising medium.)

Readers of the RURAL WORLD, writing 'to or calling upon, any one advertising in our columns, will do us a favor if they will say they saw the advertisement in this paper.

Premiums for Clubs.

In reply to inquiries whether we will offer premiums for large clubs we will say that we have concluded to open a premium list in which our friends can make such offers as they like in poultry, hogs, pigs, implements, machines, nursery stock, and such articles as we have been in the habit offering in years Those wishing to aid in extending the circulation of the RURAL WORLD should send us letters stating what they will give. We will keep list standing, giving name and postoffice of donor and the article offered. Our subscribers can now go to work getting up clubs with the assurance that every large club maker will get a fine premium

RENEW! RENEW!

If you have forgotten the important matter of renewing your subscription attend to it at once. All names are stricken from our mailing list as they expire, and sometimes this causes the loss of the first numbers of the year when it may be found impossible to supply them.

This is the season to get subscribers. Everyone has more or less influence with his neighbors, and if he will try, can send us one or more subscribers, for which we shall be very thankful.

Growers of Northern Sugar Cane should see that they have the RURAL WORLD from the first issue of the year so as to secure all the proceedings of the Mississippi Valley Cane Growers' Convention held in St. Louis.

MR. E. M. MONTGOMERY and J. S. Bell. of Clark county, Mo., have purchased a fine jack from Jasper Brooks, of Cape Girardeau county, Mo. His color is black, 14 1-2 hands high, good-sized body, bone and muscle.

CAPT. JAMES HARKNESS of this city, presented at our office last week a sample of the Japanese Persimmon from Oakland, California, raised in the garden of Judge Samuel Miller, of Bluffton, Mo., could have seen it, he would have gone into ecstasies. It bears no seed or we weighed four ounces.

THOSE who contemplate attending the Mississippi Valley Horticultural Society Meeting, at New Orleans, on the 21st of February, and who will start from St. Louis on that trip, will do well to correspond with the editor of the Rural information that the Planters' House, St. purely an agricultural paper. WORLD, who will see to providing sleeping berths and making all necessary ar- o'clock, a. m. and was not put out till three rangements for their comfort. The rail- of the employes were suffocated or burned road fare is \$15.00 for the round trip to death. At about the same hour a large from St. Louis to New Orleans, with fire was raging in Neenah, Wisconsin, sleeping berths extra. Quite a party will burning the Russell House and other go from St. Louis.

GOV. COLMAN is absent from the city attending the meeting of the Minnesota Cane Growers' Association, at Minneapolis this week. It was a long, tedious cold journey to undertake, and required a good deal of urging on the part of his associates, to get him up to the starting point, as the telegraph reported deep snows, and the thermometer was down below zero, in the region he was about to visit. We hope that neither him or those who invited him, will regret that he made the journey. We have a large subscription list in Minnesota, and think it is well to bring the editor and his readers together occasionally.

MR. E. D. RICHEY, of Carlyle, Ark. was in the office this week returning from Ohio and Michigan looking after sheep and cattle to take into that growing State. He expressed himself a hundred times obliged to the RURAL WORLD for its horse, cattle and sheep departments. Through its advertising columns last spring he purchased a fine horse from an Illinois firm, for which he was offered double the money he paid for him before he reached home. He is now taking home a double-deck carload of sheep.

And thus is Arkansas improving and being improved. He has now an idea of getting a few Devon bull calves, say six to ten, to cross on the native cows of his locality, and is generally such a man as is likely to make things lively, settle where he may.

MRS. DAVIS' private hotel, centrally ceated at S. W. corner of Tenth and Locust streets, is the most popular and best managed hotel of its class in the West. The RURAL WORLD commends it to all its readors

A DREADFUL CALAMITY.

At about 4 o'clock on the morning of Wednesday last, the Newhall House, Milstories and was very soon a mass of the coinage of silver. flames. In the house at the time were the flames or hurled themselves to de-

Are we not right in designating it a dreadful calamity? Indeed it is horrible to think of. On a cold night in midwinter, with the thermometer at or below zero, 200 human beings enveloped in flames, and either burned to death or killed in trying to escape, or turned out, in a half nude state, to the icy streets.

And this same thing will occur again, not now perhaps, but sooner or later, for we are a nation of travellers, and when travelling, seldom stop to think of the dangers surrounding us.

But ought not some steps to be taken vent such catastrophes? Doubtless something will be talked about as a possible have its or his own scheme, as was the case after the Southern Hotel fire and loss of life in this city some years ago, but dignity, and because the agricultural innothing ever came of them, and but for this more terrible calamity would have seldom been thought of or mentioned again.

We think every State in the Union ught to have some law by which the possibility of such a terrible loss of life might in the case of fire be provided against if not the probability of fire itself.
We have inspectors of penitentiaries and prisons and of the state elemosinary finstitutions, of boilers and of steamboats and ought also to have a commission of intuitions, of boilers and of steamboats and ought also to have a commission of intuitions.

Rease don't "elevate" the department of 1880 was put in my hands some days ago by Capt. H. B. Richards, the department correspondent for this county, and a thorough, go-ahead farmer and an entity of the state of spectors of public buildings such as hotels, theatres, churches, factories, etc., hotels, theatres, churches, factories, etc., in which are gathered hundreds and sometimes thousands of persons all of whom may at any moment by a cry of copies will fall into the hands of farmwhom may at any moment by a cry of

The expenses of such a commission could be readily taxed, in the way of license, on the owner of every building inspected, and no such building should be occupied until it had been inspected and licensed by the commission.

Many times within recent years have the scholars in the public schools of St. Louis been alarmed by the cry of fire, and though no accident of moment has occurred and no loss of property sustained it was more because the alarms were given in the daytime and the scholars and teachers drilled in their conduct and mode of exit on such occasions.

In a church, theatre, factory or public meeting no such drilling is possible, hence the necessity of ample provision Mrs. Sell of that place, which mesaured of modes of egress, such as fire escapes. seven and a half inches in diameter. If doors opening outward into wide halls and plenty of them.

If the Missouri legislature now in session fails to make provision in some way would have secured some for him. It to prevent as far as possible a repetition of such a terrible catastrophe in this State, it will, in view of the facts now pressed upon their attention from Milwaukee be derelict in its duty to those who elected them to take just such care WORLD shall indeed occupy no second of their lives and property.

Since the above was written we have Louis, took fire on Sunday a little before 4 property to the value of \$150,000. On the day previous a circus in a town in Russian Poland took fire in which 300 persons perished. And so the world

FARMERS' MEETING.

The State Board of Agriculture, assisted by eminent speakers invited for the occasion, will hold a Farmers' Institute Meeting at the court house, Nevada City, Mo., on Tuesday, Jan. 23d, commencing at 10 o'clock A. M., and extending through the afternoon and evening. Practical farm talks will be given by men of experience. It is to be a real working farmers' meeting for the discussion of practical farm topics. Dairying, stockfeeding, farm experiments, corn-growing, and topics of like daily interest, will meeting are urged to bring out for show the produce line of interest to the public. The ladies are especially invited to attend the evening meeting, when the subject of butter-making and gardening will be introduced. This is the second meeting of the kind held by the Board of Agriculture this season, and we hope the farmers of Vernon county will show their appreciation of its efforts by turning out en masse.

Fruit In Kansas.

COL. COLMAN:-The fruit crop the coming season will not be so remuneracoming season will not be so remunerative as that of last year, the peaches are about all frozen with the cold spell we had in the early part of December. Sweet cherries, May Dukes, are all gone and the Richmond cannot be more than half a crop, while the English Morellos are injured but little and the Leib seems the hardiest of all. It seems the change was too sudden.

Rosedale, Kas., Jan., 10th, 1883. too sudden.

Rosedale, Kas., Jan., 10th, 1883.

TIME TO REFORM.

EDITOR RURAL WORLD: The party in power seemed to get on to the wrong waukee, took fire on one of the upper side of the resumption act; then again in

The State of Missouri, more than any from 150 to 200 persons, about 70 of whom other State, demanded the coinage of were employes, and at this writing it is silver, and three-fourths is piled up in understood eighty-two either perished in Washington, D. C., for want of brains to distribute it to 50,000,000 of people who struction by jumping from the windows, which were in some instances six stories high.

Are we not right in designating it a silver must be coined according to No restriction, and some way devised to distribute it where it is wanted in over three-fourths of all the counties west of Ohio to the Pacific.

Why could not postmasters in county seats distribute silver for currency and drafts on New York, as well as they could sell postage stamps?

Must we call for another Jay Cooke to assist the Treasury Department of this

The Agricultural Department and the Cabinet.

COLONEL COLMAN-I see in the Ru-RAL WORLD of Dec. 28, about the midto provide against, and if possible pre- dle of the third column, page 412, a brief remedy all over the country, and every the position of a secretaryship in the breeders has in view the preservation of newspaper and nearly every reader will cabinet. I have long desired such a step, the blood of the stock he is breeding in because the most important industry, un-derlying and supporting all other depart-ments, deserves such a recognition of its advanced. The country could be materially advanced. The last reason no longer has any weight. The reports of the department are not, as formerly, published for farmers, but for scientists. Even college graduates, a few years from school, find it difficult to understand these reports, and to the mass of farmers they are not even fixed—they are simply "gibber even Greek—they are simply "gibber-ish." Please don't "elevate" the dethusiastic sorghum raiser. I have not only read it—I have studied it. I venfire become so panic-stricken as to be unable to reach the street without tramping each other to death by the dozen.

ers who will read them of the death of the unable to reach the street without tramping and the report of the statistician, the volume is comparatively ers who will read them, or understand statistician, the volume is comparatively worthless to the class it is supposed to have been designed to benefit. It would be valuable for a text book for an advanced class in college, or as a book of reference for a finished scientist who had kept up his studies; but, with the exceptions noted above, all the information conveyed to planters in its hundreds of pages could easily be given in one-tenth the space, and could then be understood and used. If the commissioner must be and used. If the commissioner must be and used. It the commissioner must be made the secretary, call him the secretary or scientific entomology, or scientific veterinary surgery, or scientific anything, but don't mislead by using the word scientific.

HARRY CASSIL. La Grange, Tex., Jan. 8, 1883.

No Secondary Place.

COL. COLMAN:—The first number of the RURAL WORLD in its new dress for S3 is at hand. A thousand thanks for this beauitful New Years present to your readers. We receive this as an earnest that your valuable paper is not to occupy a secondary place among the agricultural journals of our country. E. R. SHANKLAND.

Dubuque, Iowa.

REMARKS .- Thanks for your compliment. We have received so many of a similar character as to assure us our new dress is welcomed by all. The RURAL place but take the lead at least in the Mississippi Valley; but it will ever be as

Dec. 28th appeared a letter from H. C. sides. Jacobs, of Albany, Texas, making a charge against one O. Rust, a manufacturer of well-augers. The following letter is Mr. Rust's explanation:

Col. Colman—In September, 1881, Messrs. Berry & Fleming, bankers at Cisco, Texas, sent me a certificate of deposit by Henry C. Jacobs for \$285, and also an order for a well-drilling machine. I for-warded the machine to Berry & Fleming as per order, and they sent me the money in October, 1881. After that, Mr. Jacobs wrote me that he had ordered the ma-chine for other parties, and wanted a commission of 20 per cent., amounting to \$57. I did not pay it and he sent the matter to a collecting agent here. It was returned unpaid. This is the only transaction ever had with Mr. Jacobs. Respectfully, L. O. Rust.

Wants an Incubator.

A subscriber writing from Springfield, Mo., wants to know where he can get an be presented. Farmers attending the Incubator with instructions how to use it, and how to manage the chicks after fine samples of produce or anything in hatching. Who can give him the infor-

Please give plain directions in the RU-RAL WORLD, for making a chicken incu-bator, like the one used by Mrs. Carr. Brunswick, Mo. WM. K.

Coming Meetings.

January 20th.—Kansas Cane Growers' Association, annual meeting, Topeka. About January 20th.

January 25th.-Annual meeting of the Indiana State Board of Agriculture, Indianapolis.

January 30th.—Annual meeting Indiana Cattle Breeders' Association, Indianapolis. January 30th to February 3d.—Agricultural Institute, Illinois Industrial

University, Champaign, Ills. January 31st .- Annual meeting of the Indiana Swine Breeders' Association and of the Indiana Wool Growers' Association, Indianapolis.

COLMAN'S RURAL WORLD.

February 13th-15th.-Wisconsin State ane Growers' Association, Madison. February 14th.-Seventeenth annual Northwestern Dairymen's Association, Mantoka, Minn.

February 21st.—Mississippi Valley Horticultural Society's annual meeting, New Orleans. S. M. Tracy, Secretary, Columbia, Mo.

Che Cattle Pard.

The use of Thoroughbred Cattle. Readers of Agricultural and Stock pa-

pers are doubtless at a loss at times, to see how it is possible for those who purchase highly bred stock, and pay the enormous prices at which they are sold, to make of it a paying business; but there is no enigma about it, nor any doubt as to its being legitimate or successful. In order to get a clear understanding of the matter, we have to separate the business article warmly favoring the elevation of of breeding for breeders, and breeding the commissionership of agriculture to for the butcher. He who breeds for its purity, that the qualities which distinguish it from all others, and particularly from native stock, may be preserved in its integrity. This he does because of the well known axiom that, like produces like, and he can be sure that in coupling his thoroughbreds, the produce will be like unto the sire or dam, or both, and partake of their characteristics.

The beef breeds of thoroughbred cattle are used in this country, only to reproduce their own kind, whilst in Great Britain, they have been used as dairy stock during their breeding years as

The milk breeds of cattle are utilized here, hence our best butter and cheese come from the highest and best bred herds of Jerseys, Holsteins and Ayrshires. But be they what they may, beef or milk, thoroughbred cattle are kept and bred to reproduce their own kind, and their produce is expected to be equal in value to

their sire, or dam at the proper age. rigors of the elements, winter and summer. When we take a thoroughbred sire, and stand him at the head of a herd of such cows we find that his get at three years old, will outweigh pure natives of four years of age, three or four hundred pounds, and that the flesh is so far superior that it will bring from two to four cents per pound more in the stock yards.

A pure bred Jersey bull, or an Ayrshire or Holstein, added to a dairy herd, will nearly double the value of the heifers gotton by him, and the butter or cheese will be of a superior quality, and hence bring a higher price in the

market. The breeder therefore produces bulls, who in turn produce steers for beef, or he produces heifers to be utilized in reproducing their own kind. The farmer producing their own kind. The farmer buying his bulls can afford to pay a high price for an animal who shall add three to four hundred pounds to his steers, steers that will be ready for the butcher at least a year before the scrub would, In the issue of the RURAL WORLD of and bring a higher price per pound be-

will be advertised in the RURAL WORLD, and we counsel readers who have not already provided themselves to be on the lookout for one or more good animals.

It needs not that we point to the ease with which we can produce grass and hay, and corn, or the present value of beef, and butter and cheese, to show that the rearing of stock is cheaply and easily done, much, very much more so than the cereal crops. The stock men everywhere are getting rich fast, whilst the farmer, at farming proper, has as much as he can do to make both ends meet after a year of the hardest kind of

The Shorthorn.

shambles, nor are we to be understood as saying that no other carcass ever sold for more per pound off the butchers block We mean that take him all in all as a beef producing animal, adapted to the use of the farmer in every degree of latitude where cattle of any kind can be bred and utilized no other breed has yet been produced that has excelled the shorthorn. This is better exemplified by the fact that in the English speaking world he is more generally found than any other, and the further fact that no breed of animals known to the farmer or fancier has ever approached him in the matter of price. In the islands of Great Britain, in Australia, Canada and the United States he outnumbers all other breeds put together and can show ten to one of any other.

This discrimination and very general popularity is perhaps the most striking proof of his value and general usefulness.

New York State Sugar Cane Association.
Geneva, N. Y. C. J. Reynolds, Secretary, Corning, New York.

dence of the point we make that as a beef animal bred for profit by the farmer he is unexcelled. farmer he is unexcelled.

The Hereford has his merits, and they are neither few nor small; so has the Devon and the hornless Aberdeen and Angus; but they are neither of them comparable with the Shorthorns let their friends say what they may. They are hardy and thrifty can be inured to hardship and to wrestle for and get their own living. They are born and brought up on the pasture, and though like all grow ing, flesh-forming animals will thrive better on much than on little, and on that which is good better than on that which is not so good, still if occasion requires they will live on the same as our

natives and put on twenty to forty per cent. more flesh in the same time and make much better meat. make much better meat.
They are, moreover, regular breeders bringing a calf every year, and have milk enough to raise them. The males are of the character called impressive, that is, able to communicate their own realities to their effective their interest. qualities to their offspring thus raising from the native dam calves that will almost equal themselves in weight at the

where then is the necessity for doing what many would advise us, run after other breeds of really less value and for which in the craze for something new they would have us pay three or four times as much money. Let us stick to the Shorthorn.

Public Sale of Shorthorns.

The sale of Shorthorn cattle to be made by H. D. Ayres at the Fair Grounds, Marshall, Saline county, Mo., on the 21st February ought to attract the attention of fullest confidence. buyers for hundreds of miles around. Mr. Avres is no novice at the business of breeding, having been engaged in it many years in Bourbon county, Kentucky, he removed to this State some five years ago and has followed it ever since. The males to which his cows have been bred are not only of the choicest families but the best specimens of those families. The 14th Duke of Thorndale, one of the number, when last sold brought the handsome price of fourteen thousand nine hundred dollars, a price almost unprecedented, and his get have been universally esteemed. The other bulls mentioned in the advertisement though not of the same high character are nevertheless first class and their produce will be looked for with considerable anxiety. The utility of this course is seen, when we cross them upon inferior breeds, animals that have not been earefully handled and bred for centuries, and had all their good points brought to perfection by judicious and scientific coupling, but have on the contrary been allowed to roam at their own sweet wills, and to get their own living, exposed to all the get their own living, exposed to all the get their own living, exposed to all the get their own sweet wills, and to get their own living, exposed to all the get their own living the get their own living the good families, but highly bred and justly prized; but what is highly commendable on Mr. Ayres' part and justly prized; but what is highly commendable on Mr. Ayres' part and justly prized; but what is highly commendable on Mr. Ayres' part and justly prized; but what is highly commendable on Mr. Ayres' part and justly prized; but what is highly commendable on Mr. Ayres' part and justly prized; but what is highly commendable on Mr. Ayres' part and justly prized; but what is highly commendable on Mr. Ayres' part and justly prized; but what is highly commendable on Mr. Ayres' part and justly prized; but what is highly commendable on Mr. Ayres' part and justly prized; but what is highly commendable on Mr. Ayres' part and justly prized; but what is highly commendable on Mr. Ayres' part and justly prized; but what is highly commendable on Mr. Ayres' part and justly prized; but what is highly commendable on Mr. Ayres' part and justly prized; but what is highly commendable on Mr. Ayres' part and justly prized; but what is highly commendable on Mr. Ayres' part and jus service and subject them to the same treatment as his native cows. They have treatment as his native cows. They have not been stabled and blanketed and fed for exhibition, but kept in the open field and bred for utility rather than show. Of the ninety-seven head to be sold, twenty-seven will be young bulls of various ages, thus offering one of the best opportunities our Missouri and western buyers will have this year to get what they want near at home thoroughly according to the proposed to the state of the second that the second the second that the they want near at home thoroughly acclimated and without the trouble and expense of going five hundred miles for it.
We speak whereof we know both of the
honorable character of the man and the excellence of his cattle. Write H. D. Ayres, Arrowrock, Mo., for catalogue.

A Good Bargain.

Some weeks since we announced that K. H. Allan, of O'Fallon, St. Charles Co., Mo., had sold his farm and purchased a much larger one in Boone county, Mo., and was willing, nay, desirous of selling with him. The animals are well bred, tail. bring a higher price per pound besides.

During the ensuing Spring and Sumbreeders and the young things all the process are process. rare opportunity for those who want a few head to get them cheaply and a splendid chance for some one to get a small herd entire at a very low price. The cattle may be seen on the farm or he may be addressed as above.

Great Milking Short-Horn Cows.

Stirred up at length by the constant reports of the large yields of milk of Holstein cows, and of butter of the Guernseys and Jerseys, the breeders of Shorthorns are just beginning to tell what their cows are capable of doing in the dairy line, and we hope they will continue this exhibition for the benefit of the country. Formerly the Short-horns were univers-Formerly the Short-horns were universally bred for a combination of great milk yields, and, when dried off and fattened, for making quickly and cheaply an excellent The Shorthorn.

The Shorthorn has never been excelled as a beef producing animal. We do not mean by this that he has never been beaten in the show ring or at the beaten in the show ring or at the show ring where they are much more extensively bred than in the Eastern.

In the *Breeders' Gazette*, we find recent-

in the Drewers' trazette, we find recent-ly reported the milking of a Short-horn cow belonging to J. F. Jones, of Clark Co., Ky. On March 16th her owner be-gan weighing her milk with the follow-ing results:

In 244 days......10,068

Her greatest yield in any one day was 63 1-4 pounds. "For the first month this cow was fed on hay and grass, after which she was turned on grass with the rest of the herd, having no grain what-

Considering the above feed for the cow. we think her milking extraordinary, as it must be recollected that the cows of other breeds, whose great records of milk are while the sub-soil is kept springy by the

February 10th.—Annual meeting of the lew York State Sugar Cane Association, deneva, N. Y. C. J. Reynolds, Secrebeef animal bred for profit by the detection of milk, which they could digest. This is a great extra advantage to them, for we know as a general rule, that the way a cow is fed adds largely to or diminishes the quantity of milk she will give. Hereafter we will report some but-ter products of Short-horn cows ap-proaching those of the best of the Chan-nel Island breeds.—[Rural New Yorker.

The Horseman.

Belle Chief, owned by C. D. Colman of St. Louis, will drop a foal by Monitor in May. She is a large, rangy, bay mare by Clark Chief, son of Mambrino Chief, who with only a short period in the stud 'sired such good ones as Croxie 2.191-4; Woodford Chief 2.221-4; Blanche Amory 2.26, and four others in the 2.30 list. He was also the sire of the dam of Wilson 2.211-4, and the sire of Stocking Chief, who got Humboldt 2.20, and all his get were remarkably gifted with speed. For the number of his get, he produced a larger proportion of fast trotters than any other son of the great Mambrino Chief.

A Good Jack Wanted.

COL. COLMAN—Where can I buy me a ood jack at a fair price? A. J. C. good jack at a fair price? Ottumwa, Iowa.

Answer: Address Capt. Charles E. Leonard, Bell Air, Cooper Co., Mo. Seehis advertisement in our breeders' directory. He is both an honorable and a responsible man, and entitled to your

Box Stalls for Horses.

A writer in the National Live Stock Journal expatiates eloquently and truthfully upon the virtues of box stalls. He

says: brings to the horse the greatest number of benefits, is the capacious box stall. In densely crowded cities, wherein land is exceedingly valuable, the box may be impracticable. But in very many cities even this comfort could be introduced. with pecuniary profit. Private stables should never be built without a box stall, if for no further use than hospital purposes; and public stables, even when the ground is valuable, should be provided with these great blessings. If the stall is not larger than ten feet long and eight feet wide, the horse can move around freely in it; and rest very fre-quently consists as much in changing position as in unconsciousness. When he is tired, or leg weary, or foot-sore, he can lie down at full length and enjoy the indescribable luxury of stretching out all four limbs to their utmost capacity. Then he can eat his food from the remaind with four limbs to their utmost capacity. Then he can eat his food from the ground without any danger of the seeds flying into his eyes, or of dragging the hay under his feet, or making it unit for anything else than bedding. Then he can secure free ventilation without being exposed to drafts either at the head or rear of the stall. Then, in sickness, he has a commodious chamber, and in health placewhere he can take an abundance of natural exercise, which is so necessary natural exercise, which is so necessary for his general health, as well as the general preservation of his muscles and feet. The horse is a much more restless animal than man. If penal punishment consisted in tying up the guilty man, by the head, in a narrow confinement, for twenty-four hours without intermission. it would be denounced as unnecessary cruelty; and yet horses are thus universally treated with no apparent consciousness of the cruelty thereby practiced. In the box stall all this is avoided. The horse eats naturally, lies down and sleeps naturally, and roams about to take his necessary exercise naturally. The only objection, that has ever been urged against the box stall, aside from its ex-This is an effectual remedy where the tail, from the dock to the floating general rule. Comfort, cleanliness, prolonged usefulness, and continued health and soundness, therefore, plead for the general introduction of box stalls for horses. In the stable economy of the near future they may become universally

Colt Training.

In California, some of the noted breeders of trotters who have startled the Eastern breeders by the wonderful performances of their youngsters, make miniature tracks and work their colts on them even before weaning them. How this is done is told by Mr. O. A. Hickok, a noted trainer and driver, who spends much of his time in California, to a Spirit of the Times reporter, in an interview, as fol-

The principal miniature track is about The principal miniature track is about a twelfth of a mile in circumference. It is enclosed by a board fence, with the posts set on the outside. I noticed that there was a top guard of iron piping or railing, carried above the board fencing, as if some unruly colt had attempted to fly the track, and this railing was added as a preventive; of course the railing could be dispensed with, by boarding higher. higher.

The track itself is about six feet wide, and is made close up to the outside fence. The inside is bounded by the usual rail-The inside is bounded by the usual railing of a trotting course, only a little higher. The track is link-shaped, ascustomary, for an approved mile course, two comparatively long stretches, with the turns well thrown up toward the outside, and there is a slight grading from outside on the straights, sufficient to prevent the rain from settling on it. The track-bed is dug out and leveled, it is covered with a coating of manure and tan-bark, over which is spread fine loam. his Mar oper whe trota took From the work its work danger on they ture Quand prie trac who simp

first and a y stra faste

Jers Parl bred pose larg colo by J foale bert tiane Tec who is a the Blac Lam

and for Har Ver a puing full has

mile a fra aver the t mar ance have road seas Pied a ho actie subs

ng the e pro-digest. them, nat the or di-he will me but-ws ap-Chan-

lman of nitor in y mare Chief. he stud .191-4; Amory st. He Wilson Chief, d. For uced a

an any

rles E. o. Seed direct le and o your Stock truth-

ause it number k stall. in land y cities oduced stables ex stall, al pur-hen the-rovided stall is: d eight move ry freore, he joy the out all

Then d withng into ything nce of cessary as the les and restless ent, for

scious-ed. In: l. The l sleeps-ake his ne only
urged
its exhat the
nst the
ir. Of enough k of the t; but, m. If wash-

s, pro-health for the

of the versally

breede Easterformminiaa them this is a noted nuch of it of the as fols about

ice. It with the ed that bing or added railing parding t wide. e fence.
al raila little
ped, as

course, s, with he out-g from to pre-t. The ed, it is ure and e loam, g firm, by the

ourse?
Oh! yes; I have seen two and three year olds turned in, and they showed a stroke as steady and carriage as perfect as if in harness, to the great admiration of the visitors. I think such change has a good effect, and is capital medicine for a celt who becomes track-sick, or needs only jogging for a time, as the free exercise can be given, fast or slow, according to the inclination of the man inside the to the inclination of the man inside the

enclosure.

Please state fully your opinion of the utility of the miniature course as a fac-

tor in colt training.

I think it offers special advantages; its first use gives them the trotting motion and speed. I saw Hinda Rose, when but a year old, trot a 2:40 gait along the straight sides. I notice the colts trot faster of their own accord on the stretches. In addition to the earlier commencement such tracks afford, there is not much danger of overwork. A colt is very much different from a matured horse in making speed; its muscles, joints and tendons are tender. I always govern the work of my colt by the way he feels and acts. If you get a colt tired, he is apt to fall into bad habits of gait and behavior, and becoming sore in consequence, he will then show no trot. But an aged horse, with a formed gait and

Horse Notes.

Mr. Peter R. Parsell of Jerseyville, Jersey Co., Ill., has just bought of S. W. Parlin. Boston, a promising, standard bred, Lambert stallion, which he proposes maning Boston Lambert. He is a large, rangy, stylish colt of a dark bay color, with black points and star. bred by J. A. Sawyer, Esq., of Allston, Mass., foaled May 1, 1877, got by Jubilee hambert, he by Daniel Lambert: dam Gentianella, by old Golddust, grandam by Tecumseh, sire of the trotter Pat Hunt, whose record to wagon is 2.25. Tecumseh is also sire of Capt. Walker which got the dam of the noted trotting stallion Black Cloud, record 2.17 1-2. Jubilee Lambert has a faster record (2.25) than any other entire son of Daniel Lambert. He is a horse of good substance, very strongly built and now owned jointly by Mr. W. H. Wilson of Cynthiana, Ky., and Mr. Otto Felton who are using him for stock purposes. His dam was the Harvey mare by the Taft Horse, a sire of Vermont Black Hawk. Gentianella has a public record of 2.35, won when carrying Boston Lambert, and has trotted a full mile on a sandy track in 2.27. She has also trotted halves at Beacon Park in 1.10 and once trotted fifteen consecutive miles over that track, without urging, in a fraction less than forty-four minutes, averaging a mile in 2.52 1-4, and trotting the thirteenth mile in 2.34 1-2. She is a mare of wonderful courage and endurance, and thought by good judges to have no superior in New England as a road mare. She was bred the past season to Almont Eagle, full brother to Piedmont, 2.17 1-4. Boston Lambert to a horse of fine style and excellent trotting action, is powerfully muscled, has great substance and weighed with a light blanket and halter, the morning of the

manure, etc., and so the work neither jurns or spress the coit.

There is but one colt exercised at a time, and two men are stationed in side of the track, one near each turn, whose duty it is to keep the colt moving, for he will naturally slacken up a little on the tirack.

When does this mode of training begin, and how are the colts made to understand what is required of them?

I believe some are put in just before weaning them, and weanlings are worked regularly, perhaps not daily like older colts, but yet often enough to include the idea of their lessons. They are handled and gentled at this time, and a yearlings are broken to harmess; but heir free work is continued on the miniature track as well. Some colts, which are track as well. Some colts, when a yearling begin and how are the colts made to understand what is required of them?

I believe some are put in just before weaning them, and weanlings are worked regularly, perhaps not daily like older colts, but yet often enough to limete the idea of their lessons. They are handled and gentled at this time, and yearlings are broken to harmess; but her track as well. Some colts, when the standing gentlemen's road broses. Shorthorn cattle and Poland broses Breeders' Association and those of the feature of the price of the price of both the National Horse Breeders' Association and those of the feature to he colts when the standing gentlemen's road horses. Shorthorn cattle and Poland broses are overly and a yearlings are broken to harmess; but they are handled and gentled at this time, and a yearlings are broken to harmess; but they are playfully, jump and panage; but they are broken to have fully and some quieted by worked to have him settled to his trot again. How long a time, daily, is the only one provided with a small stand in the center of the earlies of t

The Howe Scales have all the latest improvements. It is true economy to buy the best. Borden, Sellect & Co., Aengts, St. Louis.

Since Dicken's death, twelve years ago, 4,239,000 volumes of his works have been sold in England alone.

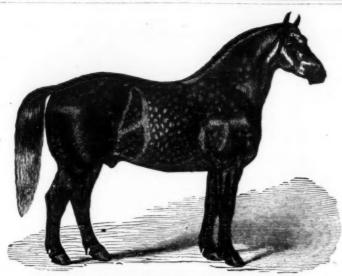
The slave traffic still continues on the east coast of Africa. It has been broken up on the west coast.

For Throat Diseases and Coughs, Brown's Bronchial Troches, like all other really good things, are frequently imi-tated. The genuine are sold only in

The number of liquor saloons in Maine increased from \$30 in 1881 to 918 in 1882, according to a census bulletin.

Wm. Beckett, Fairfax, Mo., says:
"Two bottles of Brown's Iron Bitters cured me of the ague."

A bull-fight in Tucson, Arizona, on a recent Sabbath, was attended by the band of the United States Sixth Calvary.



Percheron Stallion "GILDINO" (No. 2008, P. N. S. B.)
One of nearly 1,000 imported from France by M. W. Dunham, Wayne Du Page County, Illinois.

A clergyman who changed his faith from that of one sect to another so fre-quently as to excite comment declared that he had seven good reasons therefor —"a wife and six children."

To Consumptives.

"Golden Medical Discovery" is a concentrated, potent alterative, or blood-cleansing remedy, that wins golden opinions from all who use it for any humor, from the common pimple, blotch, or eruption, to the formidable scrofulous swelling or ulcers. Internal fever, soreness and ulceration, yield to its benign influences. Consumption, which is but a scrofulous affection of the lungs, may, in its early stages, be cured by a free use of this God-given remedy. See article on consumption and its treatment in Part III of the World's Dispensary Dime Series of pamphlets, costs two stamps, post-paid. Address World's Dispensary Medical Association, Buffalo, N. Y.

A man at Ramway, N. J., tried to

A man at Ramway, N. J., tried to domesticate a blue heron. He lost one eye, several pinches of flesh, a part of his trousers, and his bird, for in the struggle for mastery he was obliged to shoot and kill his pet.

Organs for Only \$43.00.

The special offer made in this paper by Daniel F. Beatty, the world-renowned organ and piano man, places a first-class organ within the reach of all. An advantage in ordering of him lies in the fact that the house is of long standing perfectly reliable and Mr. Beatty will do exactly as he promises, and he promises exactly as he promises; and he promises to take back the organ, after one year's use, if not perfectly satisfactory, and re-fund all money paid him, with interest from the day on which it is sent.

A brave and faithful guardian of our homes and property rescued from imminent peril.

A VERY popular and well-known member of our police force, who has performed duty twelve years at the Union R.R. Depot, on Exchange Place, in Providence, K.I., gives his unsolicited testimony. Hear him:—

"I have been dreadfully troubled with disease of the Kidneys and Liver during the past six months; at times I was so severely afflicted that I was unable to stand on my feet, as my feet and lower parts of my legs were very badly swollen;

Depth, on Kehang

Jorden of the molecular part of the second of the Kikhes and Liver during the past is months at time I was observed specific.

Jorden of the molecular part of the Kikhes and Liver during the past is months at time I was observed specific.

Jorden of the Kikhes and Liver during the past is months at time I was observed specific.

Jorden of the Kikhes and Liver during the past is months at time I was observed specific.

Jorden of the Kikhes and Liver during the past is months at time I was observed specific.

Jorden of the Kikhes and Liver during the past is months at time I was observed specific.

Jorden of the Kikhes and Liver during the past is months at time I was observed that the past is months at time I was observed the time of the Kikhes and Liver during the past is months at time I was observed the Kikhes and Liver during the past is months at time I was observed with mediant of the Kikhes and Liver during the past is months at time I was observed the time of the Kikhes and Liver during the past is months at time I was observed the time of the Kikhes and Liver during the past is months at time I was observed the time of the Kikhes and Liver during the past is months at time I was observed the time of the Kikhes and Liver during the past is months at time of the Kikhes and Liver during the past is months at time I was observed with mediant of the Kikhes and Liver during the past is months at time I was observed with mediant of the Kikhes and Liver during the past is months at time I was observed with an an and the time of the Kikhes and Liver during the past is months at time of the Kikhes and Liver during the past is months at time of the Kikhes and Liver during the past is months at time of the Kikhes and Liver during the past is months at time of the Kikhes and Liver during the past is months at time of the Kikhes and family gathering over 300 of his descendants were present.

Aver's Hair Vigor improves the beauty of the hair and promotes its growth. It imparts an attractive appearance, a delightful and lasting perfume. While it stimulates the roots, cleanses the scalp, and adds elegance to luxuriance, its effects are enduring; and thus it proves itself to be the best and cheapest article for toilet use.

A telegram from Trautenau, Bohemia, says that fifty Spiritualists residing there have been summoned before the magistrate. The complaint is that mental derangements result from their practices.

DELEVAN, WIS., Sept. 24, 1878.

GENTS—I have taken not quite one bottle of the Hop Bitters. I was a feeble old man of 78 when I got it. To-day I am as active and feel as well as I did at 30. I see a great many that need such a specifically.

PUBLIC SALE OF SHORT-HORNS!

MARSHALL, MO., FEB. 21, 1883.

I will sell my entire heard of Short horn cat-tle at the Fair Grounds, Marshall, Saline county, Mo., on Wednesday, 21st of February next-The heard consists of about 100 head—70 females and 27 bulls, Oxford Barrington 2d (10309 S. H. R.) at the head.

(10309 S. H. R.) at the head.

The families represented in the heard are Wiley Duchesses, Craggs, Bracelets, Cambrias, Agathas, Dairymaids, Primroses, &c., &c.

The cows are sired by the 14th Duke of Thorndale 827, 3d Duke of Onedia 1777, Duke of Woodland 6428, 5th Lord Oxford 6685, Oxford Brigand 9048, Kirklevington Duke 2d 10121, 1st Cambridge Rose Duke 4840, 2d Cambridge Rose Duke 4840, 2d Cambridge Rose Duke 4841, Oxford Roan Duke 9059, Duke of the Rose 8477.

There will be no postponement of the sale on account of bad weather as all will be under shelter. Catalogues will be ready by 1st of February. Address me,

H. D. AYRES, Arrow Rock, Mo. COL. L. P. MUIR, Auctioneer.

YOUNG HEIFERS. The Chieago and Montana Live Stock Co. desire cattle dealers and others having young heifers for sale to send thenumber, age, quality and price per head, delivered at Union Stock Yards, Chieago, Ill. Address, J. R. WICKERSHAM, Sec., Room 4, Metropolitan Block, Chieago, Ill.

BREEDERS' DIRECTORY.

LIVE STOCK AUCTIONEERS.

JAMES W. JUDY, Tallula, Menard county Ills., live stock auctioneer. Sales made in all parts of the country. Refers to any breeder in the west.

PHIL. C. KIDD, Lexington, Ky., live stock auctioneer. Sales promptly attended to in all parts of the country. Correspondence solicited.

L. P. MUIR, Paris, Ky., live stock auctioneer States made in any part of the United states or Canada. All correspondence prompt ly answered.

COL. JOHN SCOTT, Nevada, Iowa, live stock auctioneer. Sales made in all parts of the country, at reasonable rates. Correspond-ence solicited.

T. C. LIPPITT, Shenandoah, Iowa, breeder of and dealer in American Merino sheep, Size, constitution and amount of clensed wool a specialty. Stock rams for sale.

CHAS. F. MILLS, Springfield, Ill., imported and breeder of Clydesdale horses, Jersey cattle, Cotswold sheep and Berkshire swine Purity of blood and reasonable prices guaranteed. WILL R. KING, Peabody, Marshall, Saline Co., Mo., breeder of Short-horn cattle and Cotswold sheep. Grand Airdrie No. 8659 S. H. R. a Renick Rose of Sharon at head of herd. Good stock for sale.

H. D. AYRES, Arrow Rock, Saline county, Mo., breeder of Short-horn cattle. Ox-ford Barrington 2nd 10309 S. H. R. at head of herd.

L. PALMER, Sturgeon, Boon County, Mo. sale. Fifth Duke of Acklem (Rose of Sharon) and Commander (pure) Booth at head of herd.

H., V. P. BLOCK, Aberdeen, Pike county, bigh-bred pure and high-bred Percheron stallions and mares by imported Napoleon Bonaparte, champion Almack trotters, pure Jerseys, Short-horn cattle and Berkshire pigs. Send for catalogues.

H. ALLEN, Breeder of Thoroughbred Short-horn cattle, Cotswold sheep, Berkshire hogs, Bronze turkeys and Light Brahmer fowls. Allendale Stock Farm, O'Fal-lon, St. Charles county, Mo.

SAMUEL JEWETT, Independence, Mo., importer and breeder of registered American Merino sheep. Satisfaction guaranteed to purchasers.

MERINO SHEEP—H. V. Pugsley, Platts-burg, Clinton county, Mo., breeder of registered Merino sheep. Prince, with record of 34 1-2, stands at head of flock. Call or write.

R. C. PEW, Prairieville, Pike county, Mo., Shropshire sheep. Ewes and rams of all ages for sale. Correspondence solicited.

D. W. McQUITTY, breeder of Short-horn registered Américan Merino sheep, Roche-port, Mo. Stock for sale.

CHAS. E. LEONARD, Bell Air, Cooper county, Mo., breeder of Short-horn cattle, Jacks and Merino sheep. Inspection of herd and correspondence solicited.

P. S. ALEXANDER, Lone Jack, Mo., im-porter and breeder of Cotswold sheep. Satisfaction guaranteed. Call or write.

H. B. SCOTT, Sedalia, Mo., breeder of pure and Poland China swine. Eight young bulls for sale.

R. T. McCULLY & BRO., Lees Summit, Mo. breeders and insporters of thoroughbree merino sheep of the very best strains. Prices reasonable and satisfaction guaranteed. POR SALE—Three Jersey bull caives. For pedigree, age and prices, address O. L. WALKER & SONS Craig Crook Farm, Oronogo,

J. BELL & SON, Summerville, Texas coun-ty, Mo., breeders of pure Spanish Merians sheep. Choice ewes and rams at wholesale and retail.

G. B. BOTHWELL, Breckenridge, Caldwell 7,000 to select from. Call or write. Prices reasonable.

CHESTER WHITE HOGS. H. W. Tonkins, Fenton, St. Louis County, Mo., breeder of improved Chester White pigs. Stock for sale at reasonable prices. Ship from St. Louis.

JOS. E. MILLER, Ellwood Stock Farm Belleville, Ill., breeder of Holstein cattle Shropshire sheep and Yorkshire swine.

SHORT-HORN CATTLE. POLAND CHINA SWINE.

Bred and for sale by J.H. ALLISON,
Butler, Bates county, Mo.

W. Pleasants, Wright City, Mo., offers for sale choice fowls and eggs of L. Brah-mas, P. Cochins, P. Rock, W. Leghorns and Aylesbury Ducks. Established 1871

D.R. H. B. BUTTS, Louisiana, Pike county, Mo., breeder of Jersey cattle. Fifty head to select from. Send for catalogue. Also Bremen geese and Plymouth Rock fowls.

RUSSELL & AKERS,
(Successors to H.H.Russell)
Warrensburg, Mo., breeder of
thoroughbred Poland China Swine. A portion
of herd recorded in A. P. C. Record. Stock
warranted as represented. Special rates by
express. Correspondence solicited.

DR ABRAM NEFF, Arrow Rock, Saline county, Mo., breeder of Short-horn cattle. Ornanthe Duke at head of herd. Correspondence solicited. FOR SALE.

Seven pair Thoroughbred Jersey Reds, \$10 to \$15 the pair; Six Poland China Sow Pigs, \$7 to \$15 each, all pure bloed and nice from registered stock; also Two pair or tries Mammoth Bronze Turkeys, \$6 the pair, \$8 tmost atte what you want and send amount you wish to invest. Satisfaction guaranteed. Address, B. R. WESCOTT, Edgewood, Ill.

dress, B. R. WESCOTT, Edgewood, In.

BERKSHIRES FOR SALE.

I have on hand a choice lot of pigs, old enough to ship, and as good as can be found breeding. Stock all recorded. Address, J. BAKER SAPP, Ashland, Mo.

CATARRH CURED. Sufferers of Nasa and Bronchial CATARRH defailure, NO PAY until a cure is effected, will address at once, ED. C. MACY, M. D., Elchmond, Ind.



BLOOD a most excellent remedy the debilitated vital forces.

STILL HOLDS THE LEA 10 Years' Practical Use.



BARNES'

Popular because Simple and Easy to Operate. Ten years practical use has proven the success of the rnes' Check Rower beyond question. It has the lead with the dealers and the farmers, who have rened an unanimous verdict that it is the best Check Rower made. The following are the advantages

CHAMBERS. BERING. QUINLAN CO.. Exclusive Manufacturers. DECATUR. ILLS.

Only Single Ring ever invented that closes on Outside of the Nose. BROWN'S CLOSES ON OUTSIDE OF NOSE. CLOSES ON OUTSIDE OF NOSE.

Only Double Eing Invented.

Champion Hog Ringer,

Rings and Holder.

The only Ring that will effectly keep hogs from rooting. No sharp points in the fiesh to keep it sore.

CHAMBERS. BERING, QUINLAN CO., Exclusive Manufacturers, DECATUR, ILLS.



D. LANDRETH & SONS PHILADELPHIA

we will return your money. 3 Hoxes mailed for only \$2.50.

OUT NOVELLY STATES of each of the following Choice New Varieties: Cubar Queen Wiltermoon, sweet, inscious, and in rows to commons size, weighing over 160 that Monreal Improved Nutmen Melon, the largest and finest musk melon in cultivation; Eclipse Beet, extra early, deep blood, fine tirmly shape, very tender and sweet; Southport Fellow Globe Onion, carry, large and finest musk melon in cultivation; Eclipse Beet, extra early, deep blood, fine tirmly shape, very tender and sweet; Southport Fellow Globe Onion, carry, large and fine flavor; Southport Red Globe Onion, large, land some and best of all the red varieties; Royal German Drumbead Cabbage, handsome, large, late, sure beading variety, pronounced by all the finest in the world; Earliest Favorite Savoy Cubbage, surpaseling the cauliflower in delicious richness; Perfect Gen Squash, fiesh sweet. First of variety, superior to all others in great beauty and productiveness, 3 Collections unailed for \$1. With each of the above collections we enclose a present for your wife, mother, or daughter. Our FLOWER COLLECTION, comprising Ten Frackets of the Choicest Flower Seeds, sent post paid on receipt of 25 Cts. 3 Collections, \$1. The above 3 Complete Collections in all 46 large packets mailed for \$1.50. These UNYA RALLELED OFFERS should be taken advantage of a cinc. We warrant all our seeds strictly fresh and genuine. We supplied, last were the best ever planted. Our New Illustrated Catalogue sent FREE to any address. JOHNSON & STOKES, SEED GROWERS, PHILADELPHIA, PA.

READ, PONDER AND WELL DIGEST!

TO ALL OUR READERS,

AND BEAR IN MIMD THAT THE OFFER ONLY HOLDS GOOD FOR A SHORT TIME,

FOR EIGHT DOLLARS We will send to the Subscriber

A Life-Size, Hand-Made Crayon Portrait

Of Him or Herself, and One Year's Subscription of the

RURAL WORLD.

A specimen of the work can be seen at our office which has been examined by many people, who, without an exception, pronounce it to be fully equal in artistic workmanship to portraits made by other artists who for such work charge FIFTY DOLLARS. Bear in mind that we guarantee the portrait to

BE AN EXACT COPY

Of the small portrait each subscriber must send us. If, therefore, the small photograph is a likeness, so will our copy be, therein

Does Our Process Excel.

Those who want framed immortality, at an heretofore unhaerd of prices should not let this chance escape them, for while

Photographs Fade, Crayon Work Lasts Forever.

ED.

bor w

Jury ! while

Anoth

and p

buildi Even enjoy

Resul auctio

Mar cuse t

I am j have a night

on an slough

all g

The

ample

tentio I co while the w

with 1

istene

greate we ca This

cow b stands and fi

eats a prope althou

edy For th

The

In the for ma

expos

qualit

best n

becom

The

agains

acidit

declin

pear, small

in colused,

wrong

doing factor which

which

the c

cay, o

which

THE OLD FRONT DOOR.

- I remember the time when I used to sit
 A happy and thoughtless boy,
 When father came home from his work at las
 And I was tired of my toy;
 I remember the time, and none more sweet
 Shall I know forevermore,
 When I sat at eve at my mother's side
 On the sill of the old front door. om his work at last,
- I remember I'd sit till I fell asleep,
 And listen to their loving talk.
 While the crickets chirped and the fireflies
 Flew over the garden walk.
 And often would father tell the tale
 Of the time long years before,
 When he led his bride to a happy home
 O'er the sill of the old front door.
- I remember when grandfather failed and died, And eighty years old was he; And well I knew that never again He would ride me upon his knee; And though but a gay and thoughtiess boy, I wept and my heart was sore, When I saw them slowly bearing him out O'er the sill of the old front door.
- It is many a weary day since then,
 And I too am old and gray;
 But the tears come crowding into my eyes
 When I think of that long-past day.
 And I only hope that whatever end
 Fate may have for me in store,
 I shall pass once more, ere I pass away,
 O'er the sill of the old front door.
 —E. R. Munskittrick.

THE TAPESTRY WEAVERS. Let us take to our hearts a lesson-no lesson

- Let us take to our hearts a lesson—no lesson can braver be—
 From the ways of the tapestry weavers on the other side of the sea.

 Above their heads the pattern hangs, they study it with care.

 And while their lingers deftly work, their eyes study it with care.

 And while their lingers deftly work, their eyes they tell this drives thing, besides, of the patient, plodding weaver:

 He works on the wrong side evermore, but works for the right side ever.

 It is only when the weaving stops, and the web is tossed and turned.

 And he sees his real handiwork, that his marvelous skill is learned.

 Anthe sees his real handiwork, that his marvelous skill is learned.

 Anthe sees his real handiwork, that his marvelous skill is learned.

 Anthe sight of its declicate beauty, how it pays him for all its cost.

 No rarer, daintier work than his was ever done by the frost.

 And how happy the heart of the weaver is, and tongue but his own can tell.

 The years of man are the looms of God let down from the place of the sun, wherein we are weaving always, till the mystic web is done.

 Weaving kindly, but weaving surely, each for himself, his fate, we may not see how the right side looks, we can only weave and walt.

 But looking above for the pattern, no weaver hath need to fear.

 And when his task is ended, and the web is turned and shown.

 He shall hear the voice of the Master, it shall say to him, "Well done!"

 And when his task is ended, and the web is turned and shown.

 He shall hear the voice of the Master, it shall say to him, "Well done!"

 And when his task is ended, and the web is turned and shown.

 He shall hear the voice of the Master, it shall say to him, "Well done!"

 And when his task is ended, and the web is turned and shown.

 He shall hear the voice of the shall provide the water is any to the provide the pattern is the rich than the weaver is a say to him, "Well done!"

 And when his task is ended, and the web is done.

 We may not see how the right side looks, we can only wenve and walt.

 By the trook of the pattern of t

Glimpses at a Bad Boy's Career.

An incident occurred a few years ago while I was attending the Gainesville High School, which may not be uninteresting to the readers of the RURAL

boy's life. I know that cows have gratitude, for some years ago I was crossing a field in Dorchester, near Boston, Mass., and found a cow which had been tied to a tree with a long rope. In feeding she had gotten the rope about her legs and been thrown to the ground, and in struggling to get away had gotten the rope still more wound about her, until she lay entirely helpless. When, after a long time, I succeeded in unwinding the rope getting her on her feet, she came to me, with a kind look in her eyes, and lapped my coat-sleeve with her tongue. When I went home I told the folks that I had met a lady in great distress, and had re-One of the students known as Harry, a very bashful young fellow, was finally very bashni young fellow, was finally persuaded to pay his addresses to one of the school girls. Once started, he liked it so well he couldn't stop, One evening Cows have often been trained to know it so well he couldn't stop, One evening ner rannes, and come when called. The great American statesman and orator, Daniel Webster, asked, just before he died, that all his cattle, which he loved so much, should be driven to his window, that he might see them for the leaving. he dressed in his best clothes, parted his the development of our little city the the development of our little city the horse-lot and yard were practically the same thing. As Harry approached the front gate he found a colt trying to get front gate he found a colt trying to get inside to its mother. Just about this time the young lady raised the window, but the young lady raised the window, stack her head out, and said: "Harry, try to do what we can to make them suck her head out, and said: "Harry, while you are there I wish you would let that colt in. It is nearly dead to suck."
The next morning the facts in the case were known throughout the school. The principal, however, had heard nothing about the affair. After chapel service the students, as usual, went to the rect. indicate the second of a proposition. He gave me an easy one, namely, "the sum of the angles of a triangle are equal to two right angles." He gave us half an hour in which to do the work. I knew it would require only a few minutes to demonstrate my proposition, so I determined to devote part of my time to poetry. I made the proper diagram and began under it a few stanzas, entitled. "Harry and his Colt." I became so deeply interested in the poem that I forgot all about my mathematics. The Professor came to get my paper just as I was finishing the poem. I was chargrined, silent and astounded. He took the paper, and being very short-sighted, he did not notice what was on it. He folded it and said he would examine if at his leisure. I felt confident he would examine me also at his leisure.

The next morning prayer was unusually long. Hitherto it had not been more.

examine me also at his leisure.

The next morning prayer was unusually long. Hitherto it had not been more than half an hour in length; this morning the principal had already prayed three-quarters of an hour, and seemed to be just getting his hand in. He said that one of his students seemed to be totally deprayed, and he begged that the Almighty would extend to him a little more grace, and, if possible, lead him from the error of his way. I knew he referred to me. I couldn't stand it any longer. I determined to stop that prayer. I slipped out of the room silentity, and set some hay on fire which had been stacked against the house, and which had been starked. Almighty would extend to him a little more grace, and, if possible, lead him from the error of his way. I knew he referred to me. I couldn't stand it any longer. I determined to stop that prayer. I slipped out of the room silently, and set some hay on fire which had been stacked against the house, and which had been given the principal in payment of tuition. The students all cried "Fire!" The principal stopped his prayer, opened his eyes, took in the situation and said: "The students may refire and put out the fire, after which I shall resume my prayer. The devil seems to have got possession of this house, and our only salvation lies in prayer. There were many of us who would rather not have had any salvation lies in prayer. There were many of us who would rather not have had any salvation if it were to be purchased at such a price. After the frew as extinguished with some difficulty the students were reassembled in the chapel. The principal addressed the salicylic treatment of Rheumatism.

Salicylic treatment of Rheumatism.

Dr. Maclagan, of England, who introduced the salicylic treatment of rheumatism, or or while has retently published a work do he salicylic treatment and insisting on its advantages over every other method. Of the 30 salicylic compounds, but two besides salicine itself are employed—salicylia at employed—salicylia and salicylate of soda. After an ample trial carried through several years of practice, he concludes that in rheumatism 30 grains of salicylic treatment of hreumatism.

The students may refer and put out the fire, after which I shall resume my prayer. There were many of us who would rather not have first an ample trial carried through several years of practice, he concludes that in rheumatism 30 grains of salicylic treatment and insisting on its advantages over every other method. Of the 30 salicylic compounds, but two is sepecially when the case is of hereditary bright and salicylate of soda. After the fire after which I shall resume my prayers it is the treatment and insisting on

DOMESTIC ECONOMY.

that must be immediately attended to.

Now it is my custom, as you know, when anyone has done wrong to explain the matter to the entire school, believing

Gainesville, Tex.

COL. COLMAN: I have been a reader

their names, and come when called.

that he might see them for the last time

sulphur will kill the throat fungus called

Salicylic Treatment of Rheumatism.

diphtheria.

good pudding sauce.

when anyone has done wrong to explain the matter to the entire school, believing that when the offense is thus explained, and the punishment meted out accordingly, that the students will heartily support the teacher. It gives me great pain to state that one of my pupils has committed a most atrocious and helmous crime. He has actually written a poem. Now, in order to show you that the severest punishment I can devise is not disproportionate to the offense, I propose to read the poem to you." The pupils began to wince and prepare for the ordeal. He began reading in a tone almost as dry as the poem. When he had read a few stanzas the school, understanding the circumstances, burst out into uncontrollable laughter. The principal stopped reading, laid the paper on the pulpit stand, adjusted his spectacles, took a long breath, and said: "Either I am wholly devoid of the literary instinct, or of the sense of humor, or else this school is all a set of greenhorns. You may retire now to the recitation rooms. I will resume this matter at another time. I cannot at present translate my emotion into words. I will say, however, in conclusion, that I intend to crush this poetic vice in its infancy, or bust from the whey, and then drain off the latter; mix the curd smoothly with quarter of a pound of butter, half a pound of sugar, a cupful of finely-sifted cracker dust, six eggs well beaten and half a nutmeg grated. Put this mixture into saucers and bake light brown in a moderate oven. When the puddings are done carefully for the subject of acute nephritism manifestations are most remarkable. It often appears without any special symptoms of its own or possibly as a sequel to and all the subject of acute nephritism manifestations are most remarkable. It often appears without any special symptoms of its own or possibly as a sequel to and acute of the recovery of the man above mentioned, I have given considerable thought to the subject of acute nephritism manifestations are most remarkable. It often appears without any special symptoms of its own or possibly as a sequel to and acute of the subject of acute nephritism manifestations are most remarkable. It often appears without any special symptoms of its own or possibly as a sequel to any other considerable thought to the subject of acute nephritism manifestations are most remarkable. It often appears without any special symptoms of its own or possibly as a sequel to any other considerable thought to the subject of acute nephritism manifestations are most remarkable. It often appears without any special symptoms of its own or possibly as a sequel to any other considerable thought to the subject of acute nephritism. emotion into words.

ever, in conclusion, that I intend to crush this poetic vice in its infancy, or bust this school into the cold, icy regions of Cuba."

Box Am: when the puddings are done turn them carefully from the saucers upon a platter, pour over them a little wine, and dust them with powdered sugar. Or they may be served in the saucers, and any good with them with powdered with them. pudding sauce used with them.

Squirrel Soup.

Skin and dress two squirrels, Cut the squirrels in joints, put them into a soup-kettle with four quarts of cold water, a level table-spoonful of salt, and a salt-spoonful of pepper, and boil them slowly until they are tender, which will be in about two hours. When the squirrel-meat is tender, take it up, cut it off the bones in small pieces, and put it again in the soup. Put in also four table-spoonfuls soup. Put in also four table-spoonfuls of flour mixed to a smooth paste with four table-spoonful of butter, one table-spoonful of chopped parsley, and half a pint of cream or good milk; stir the soup until it boils, then move it away from the fire, and beat into it the yolks of two raw eggs. As soon as the eggs are mixed smoothly with the soup, see that it is palatably seasoned, and serve it at once.

Rabbit Soup, Virginia Style.

Skin and dress one large rabbit or two mall ones. Cut them in joints, small ones. Cut them in joints, put them in a soup-kettle with two onions peeled and chopped fine. quarter of a pound of salt pork or bacon, a tableof a pound of salt pork or bacon, a table-spoonful of salt, a salt-spoonful of pepper, four quarts of cold water, and the following herbs and spices, tied in a little bunch: two sprigs and roots of parsley, one sprig each of thyme and marjoram, a blade of mace and ten whole cloves. Boil the soup gently for three hours. Then remove the herbs, take up the rabbit, chop the meat in small pieces and return it to the soup. Put two tablespoonfuls each of -butter and flour over the fire, and stir them until they are brown; then stir them smoothly into the soup, let it boil for two minutes, add to it two glasses of good wine, and serve it it two glasses of good wine, and serve

CAUSE FOR APPREHENSION.

Mysterious Physical Troubles Arouse Special Dread—A Professional Experience.

Few things give more pain than dread or apprehension. Most people are able to face apparent danger heroically, but the sudden and unexpected coming of some indefinite calamity very naturally strikes terror to even the bravest. For this reason lightning and tornadoes are considered terrible; their coming and going are so sudden, unannounced and unknown. For this same reason an unthat colt in. It is nearly dead to suck."
The next morning the facts in the case were known throughout the school. The principal, however, had heard nothing about the affair. After chapel service the students, as usual, went to the recitation rooms. The class in geometry was to recite first. The principal said he would dispense with the regular recitation, instead of which he would distribute papers and require each member of the many persons who have dull and un-certain pains in various portions of the body; who are unnaturally tired one day and apparently well the next; who have an enormous ampetite at times and and apparently well the next; who have an enormous appetite at times and a loathing of food soon thereafter. Such persons are really in a dangerous condition, even though they may not realize it. The following statement of a most prominent physician, who has had unusual opportunities for investigation is of so striking and important a nature that it will be read with interest by all:

ASSOCIATED CHARLITES OF CIX For dog-wood, or ivy poisoning the following is said to be an infallible remedy: Boil wood ashes enough to make a strong lye; wash the poisoned parts in this; let it remain a few minutes and wash off in soft, lukewarm water; when ASSOCIATED CHARITIES OF CIN-CINNATI.

BOARD OF DIRECTORS. BOARD OF DIRECTORS.
Joseph Aub, M. D. Julius Reis.
Julius Balke, dr. H. A. Smith, M. D.
Mrs. F. M. Force. H. Miller.
Mrs. Geo. Hunert. Rev. Chas. W. Wendte.
Daniel Wolfe. Frk'k Lunkenheimer.
J. B. Wilson. Put the person suffering from diphtheria into a warm bed. Take a shovel of red-hot coals from the fire, sprinkle a tablespoonful or two of flour of sulphur on the hot coals and place under the bed. Remove the shovel out of the room when the afflicted person begins to cough. Let this be done for two or three nights, and it will be found that the fumes from the sulphur will kill the threat fungus called

OFFICE: No.27 1-2 WEST EIGHTH ST., O. ANDERSON, M.D., SUPERINTENDENT, CINCINNATI, O. DEC. 2, 1882.

Messrs Editors:
I have, during my professional career of many years' practice, treated a large number of various disorders, of which, perhaps, none have given me more number of various disorders, of which, perhaps, none have given me more trouble than the mysterious disease known as acute nephritis; and while it may seem strange, it is, nevertheless, true, that the physician is generally greatly annoyed by the mysterious trouble, especially when the case is of hereditary origin. It is, doubtless, the first stage of the well-known, but terrible Bright's disease, as the kidneys contain large, quantities of albumen; and while children and young people are especially liable to its attacks, it is prevalent with all classes, and usually continues until late in life.

One obstinate case which came under

fered from urinary troubles from child-hood, and that he had "doctored" a hundred times, each time improving some; after which in a short while, he would relapse into his former state of misery. I prescribed the usual therapeu-

tics known to the profession with the Miss Juliet Carson, Superintendent of the New York School of Cookery, sends the following recipes to the New York the following recipes to the New York Weekly News, and says that all recipes given in this department have been tested personally, and if closely followed will produce good results:

Marrow Pudding.

Heat a pint of milk and pour it over a loaf of stale bread grated fine; while the mixture is cooling, slice a pound of beef marrow thin, and beat four eggs thoroughly; when the bread is cold add the marrow and eggs to it, together with a glass of brandy, half a nutmeg grated, and half a pound of sugar, or more if desired. Put the pudding into a buttered is ired. Put the pudding into a buttered is ired. Put the pudding into a buttered a loaf a hour. Dust it with powdered sugar when done, and serve it with any good pudding sauce.

the nod loay off for some time. He suffered intense pain; so much so that I he had to lay off for some time. He suffered intense pain; so much so that I confess I had to resort to hypodermic inejections of morphia. My druggist who knew how disgusted I was with the case, although not willing to desert the man, advised me to try a remedy from which he (the druggist) himself. As a drowning man catches a straw, I prescribed this remedy, not letting my patient, however, know what I was giving him; and, although not a believer in nor a patron of "patent medicines," I must confess that after my fireman had taken one bottle he grew much better. I made him continue its use for a period of two months. with the most gratifying results; it really worked moders and he owes his cure and present perfect health solely to the remarkable power of Warner's Safe Kidney and most gratifying results; it really worked wonders and he owes his cure and pre-sent perfect health solely to the remark-able power of Warner's Safe Kidney and Liver Cure, the remedy which I prescrib-

> back," troublesome micturitions and frequent changes in the color of the urine which at times diminishes preceptibly. If the urine is entirely suppressed, the case probably, will terminate fatally in a very few days. Dropsy is a consequence of the suppression of urine, and the severeness of it is governed by the proportion of retention. The nervous system becomes prostrated with subsequent convulsions and irregular circulation becomes prostrated with subsequent con-convulsions and irregular circulation of the blood, which, in my estimation eventually might cause a diseased heart to give out. As I have remarked, in many kidney diseases—yes, even in Bright's disease itself—there is no per-ceptible pain in the back, and these troubles often assert themselves in various symptoms—for instance, in troublesome diarrhæa, blood poison, impaired eye-sight, nausea, loss of appetite, disordered sight, nausea, loss of appetite, disordered digestion, loss of consciousness, husky voice and many other complaints to numerous to mention. Indeed thousand of people are suffering from the first stages of Bright's disease to-day, and they do not know it. In conclusion, I would like to state that

I have, since my success with the fireman, repeatedly prescribe Warner's Safe Kidney and Liver Cure, and if my professional brethren could only be brought so far as to overcome their prejudice against proprietary medicines they would, and only the liver of the same than the same transfer of the same tr undoubtedly, find themselves recom-pensed for their supposed sacrifice of liberty, as well as by the great benefits that would accrue to the world.

O. ANDERSON, M. D.

AGENTS Wanted to sell Dr. Chase's 2000 double your money; address Dr. Chase's Printing House, Ann Arbor, Mich.

ADVERTISEMENTS.

JOHN B. BLYHOLDER Horseshoer and Farrier. Road and T. work a specialty. 2717 Franklin Ave

Splendid ! 50 Latest Style chromo cards, name 10c. Premium with 3 packs. E. H. Parde New Haven, Ct.

Shepherd Cogs for Sa'e, α choice lot of Bitches and Pups, bred from imported registered stock. R. F. Henry, Columbus, Miss.

GOOD COFFEE How to Make It HALF COST. Agents' Profits \$5 to \$10 per day, at home. J. E. SHEPARD & CO., Cincinuati, O., and Kansas City, Ma

BIG GIANT FEED MILL. Every Man His Own Miller.



The only practical Feed Mill made. The only mill Mill made. The only mill crushing corn and cob made with cast-steel grinders, Grinds faster, and does a greater variety of work than any mill of similar price. If we fail to prove the above statement, we will give you a mill free. If on the deceived. Manufactured by J. A. FIELD & CO., Sth and Howard Streets, St. Louis, Mo.

Good Cheap Lands

In Audrain and Saline Co., Mo.
Good homes and farming lands in Northeast
Missouri near good schools, churches of all
denominations and first-class railroads to all
competing markets, east, west, north and
south, over competing lines, for which no
bonded debt now exists to burden the taxpayer. Prices Low and Terms Easy. Apply
to JOHN P. CLARK& SON, Real Estate Agents,
Mexico, Mo. Office established 25 years. Send
for our papers and maps free. Mention this
paper.

TURKISH BATH ESTABLISHMENT,

311 N. Seventh St., Between Offive and Locust. GEO. F. ADAMS, M. D., SUPT.

FOR LADIES:—Monday, Thursday and Saturday mornings from 9 a. m. to 12 m.
FOR GENTLEMEN:—From 7 a. m. to 9 p. m.,
excepting the above hours for ladies,
SUNDAYS:—Gents from 7 a. m. to 12 m.

LEE'S SUMMIT NURSERIES.

MAURICE BUTTERFIELD, PROPRIETOR. (Successor to Robt. Watson.)

Fruit Trees and small fruits, wholesale and retail at reasonable prices for Spring, retail at reasonable prices for Spring, 1883. Also Hedge plants I and 2 years old. Prices will be given on application. Car loads, or sacked, boxed or baled. Address, Maurice Butterfield, Lee's Summit, Jackson, Co., Mo.

ADVERTISEMENTS.





OPrentiss

ANDRETHS PEDIGREE SEEDS SEEDS For the MERCHANT on our New Plan SEEDS For the MARKET CARDENER SEEDS For the PRIVATE FAMILY SEEDS Grown by ourselves on our own Farms

Handsome Illustrated Catalogue and Rural Register FREE TO ALL. MERCHANTS, SEND US YOUR BUSINESS CARDS FOR TRADE LIST. DAVID LANDRETH&SONS, SEED GROWERS, PHILADELPHIA

CRAPETRIES, Headquarters for VINES, tow Prices. Mailing a Specialty. FAY'S PROLIFIC. Thoroughbred LAND.

THE PEOPLE'S CYCLOPEDIA

THE LATEST, CHEAPEST, AND MOST COMPLETE CYCLOPEDIA PUBLISHED. INE LAIE 31, UNLATE 31, AND INVOLUMENT LOCALIST I UNLATE AND INVOLUMENT AND INVOLUMENT AND ADDRESS AND epitone of the transfer of the large and costly Encyclopedias, to which is access a closted and arranged since other Cyclopedias were lected and arranged since other Cyclopedias were consent time. Especially adapted to the average household.

THE MOST COMPREHENSIVE IN SCOPE.
THE MOST SYSTEMATIC IN ARRANGEMENT.
THE MOST SYSTEMATIC IN ARRANGEMENT.
THE MOST ATTRACTIVE IN APPEARANCE.
THE MOST CONVENIENT FOR USE.
THE MOST CONVENIENT FOR USE.
THE MOST PRACTICAL IN INFORMATION.
THE MOST TOPICS,
THE MOST PRACTICAL IN INFORMATION.
THE MOST TOPICS.
THE CHEAPEST IN PRICE.
THE CHEAPEST IN PRICE.
THE CHEAPEST IN PRICE.

JONES BROS. & CO., Publishers, Cincinnati, St. Louis, Chicago.

CROUP, ASTHMA, BRONCHITIS.





STARK NURSERY. 48th year. 200 acres. Catalogues free. In-ending purchasers will do well to get their ders booked early, trees for spring being ery scarce throughout the country. STARK & CO., Louisiana, Mo.

Osage Orange Seed.

W. M. KLYCE, Paris, Texas



EARLY MINNESOTA SWEET CORN Educated and practical growers now assent to our moto "That the further North Seeds are grown the earlier their product will be." We offer this year a full line of Standard Potatoes, true to name, grownon dry upland; Seotch Fyfe and page, said to be one week earlier than Early York; our bysic, said to be one week earlier than Early York; our North Star Yellow Dent Corn still takes the lead, and for folder is equal to any; of onion seed, tomal gravity of the seed of the

883 STAR SEED F

"EARLY ORANGE CANE SEEL"

FROM TEXAS.

I have for sale a large lot of the above seed of my own raising, carefully selected and pure. Price, delivered on cars here, in quantities not less than 50 pounds, 8 cents a pound. Agliberal discount on orders of 250 pounds and over.

Lagrange, Fayette Co., Texas.

PURE MINNESOTA EARLY AMBER CANE SEED.

Send for 5th Annual Circular which contains aluable instruction for Growers and Manu-acturers.

SETH H. KENNEY, Morristown, Miun.

Amber And Urange Cane Seed. I have an extra good lot of above kinds of

eed for sale at \$1 per bushel Address, X. K. STOUT, Troy, Kansas

seeds, eeds,Seeds.

PRICED CATALOGUE OF SEEDS, INCLUDING VEGETABLE, FIELD, FLOWER AND TREE SEEDS, WILL BE MAILED FREE TO ALL APPLICANTS,

J. M THORNBURN & CO.,
15 JOHN STREET, NEW YORK.

instan as to the wa its. The the lo pare and find in safe n weath better quant prepa wante nets separ rubbi made

pound prese salt the brine ally, or bo tainte Advo My April done she r Rom

barn bitter

April a cov Cann AN there at fi out o of every

Sets

MG

Year.

81.50

ISHED.

braces the faining an euts of all nation col-wn to the ear.
ISHIP.

ddress

nicago.

18. xxi-

lor,

ALF, Minn.

ve seed ed and a quan-pound. ids and IDS, Texas.

MBER

Seed.

inds of

DS.

Another old settler with ample resources and plenty of land has not \$25 worth of brief by the Chautauqua Farmer. We buildings for housing stock on his farm. Even his fresh cows and young calves

Many a man feels satisfied with the excuse that he is not able to build a barn. I am just that unfortunate myself, yet I have 37 head of cattle all under cover nights, out of the wind, dry places to lie on and all fed in mangers. With straw, slough hay or even weeds, of which any farmer usually has plenty (especially of the latter), I construct cheap, yet comfortable sheds and have my young cattle all graded and divided up into saven different lots, so that the strong will not abuse the weak.

They soon learn their places and give evidence that they appreciate and yield ample remuneration for this little attention.

I could not sleep well on a feather bed while my stock lie out at the mercy of the weather, nor enjoy a clear conscience with my cattle enduring a miserable existence even if there was any profit in it. I would not keep a cow if I could not have her in a dry shed or stable. The greatest convenience in this line is what we call the "drop" in the stable floor. This consists of the floor just behind the cow being six inches lower than where she stands. This offset keeps all the manure and filth from coming in contact with the eats and gives clean milking. The greatest failing which cattle have is the cow being six inches lower than where she stands. This offset keeps all the manure and filth from coming in contact with the cats and gives clean milking. The greatest failing which cattle have is the propensity to "push with the horns," and although it is a little cruel, the only remedy is to put them into stanchions. For this purpose a cow needs only three test of worm in width early five test of worm in width early five test of the cost of getting this milk to market the cats of worm in width early five feet of worm in which early five feet of worm in edy is to put them into stanchions. For this purpose a cow needs only three feet of room in width and five feet of room for the platform on which she stands. For small cows a little less room even

O. MOFFET.

Butter Cows.

There are many farmers who have extra good butter-cows and do not know it. They have poor pastures in summer and no shelter and indifferent food in winter. In the house, they have no convenience for making butter; the milk is set where there are no arrangements for keeping it cool in summer, and in the living room exposed to the odors of the kitchen in winter; and neither the quantity nor quality are any index of what a cow

Inexperienced and careless milkers often ruin, at least for the season, the best milch cows, and sometimes the evil becomes permanent.

Rennet.

The detriment which cheese suffers from unskillfully prepared rennet is the most crying evil which now militates against the cheese interest, both of Canada and the Section This injuries of the control da and the States. The injury done by acidity, which has been regarded as such an important factor in factory cheese making, is bad enough, but that error has reached its maximum and is now rapidly delivered in the state of th reached its maximum and is now rapidly declining, and is in a fair way to disappear, or dwindle into insignificance. So small a quantity of acid is now employed in comparison with what was formerly used, as to greatly reduce the mischief wrought by it. Badly prepared rennet is doing more mischief by far. But few factories are exempt from it. Those which have clean and sweet remnet, which have clean and sweet remnet, which will in no way warp the flavor of the cheese made with it, are the exceptions. Badly prepared rennet isther rule. It is either tainted with putrefactive decay, or sour with whey which is stale or stinking, or both. Whatever direction in sunking, or both. Whatever direction in which it is off, the cheese suffers, and the instances in which it is off are so frequent as to constitute the greatest obstacle in the way of advancement and better profits.

Dairying interests begin with the cow, and here dairymen divide in their opinions.

Some prefer the native cow, and others the way of advancement and better profits.

We should strive to be happy, and make others happy around us; for happiness is the chief aim of all."

stinking, or both. Whatever direction in which it is off, the cheese suffers, and the instances in which it is off are so frequent as to constitute the greatest obstacle in the way of advancement and better profits.

There is not the least need of any of the losses and damage done to cheese in this direction. It is just as easy to prepare rennet so it will be sweet and clean and effectual in coagulating milk and curing and preserving cheese, as it is to defile and destroy it in the way it is now done. The readers of the Advocate will find in the September number for 1879 a safe method of preparing rennet in hot weather, written out in detail, but it is better to prepare rennet in the winter in quantities sufficient to last through the following summer, than to prepare it by piecemeals when wanted. The strength of rennets is most readily and effectively separated from the skins by soaking and rubbing, or pounding them in a pickle made by putting a pint of salt into a twelve quart pail of water, soaking and pounding till the strength is all out. To preserve the pickle for summer. Iter the soaking is done, salt with a little more salt than it will dissolve, and keep the brine in a cool place, stirring it occasionally, or what is better, put it up in jugs or bottles, and if the rennets used are not tainted to begin with, it will keep safely and always be ready for use.—Farmers Advocate.

Bitter Milk.

Dairying interests begin with the very and there dairymen divide in their opin.

Some prefer the native cow, and others is great difference in cows. Chemical analysis shows that the vident loss. Dairymen should give such careful attention to their herds that they can eliminate such cows. The fact is true that the vident loss. Dairymen should give such careful attention to their herds that they can eliminate such cows. The fact is true that the breed is more important than the feed. Milk is manufactured.

The milk is made from the tissues of the cow and by her own functions, and is we can end the cow and by her own fun

Bitter Milk.

My Jersey grade heifer calved last April at the age of two years, and has done well throughout the season. Where she run in pasture there was a quantity of Roman wormwood. Since coming to the barn her feed has been English hay and one quart of corn meal per day, with raw potations. barn her feed has been English hay and one quart of corn meal per day, with once in a while a little salt, and a few raw potatoes and some pumpkins. For a few days past her milk has been very bitter, so that it tastes badly even in cooking. She will calve the first of April. One of my neighbors says he had a cow that gave bitter milk for about two months before calving, every year. Cannot there be something done for it?

Answer.—It is not probable that the effects of the Roman wormwood, even if there were any of a deleterious character at first, would continue to the present of the real results of the real results.

Y., on the 19th Dec., and is reported in present a few paragraphs:

OLEOMARGARINE VS. BUTTER. enjoy the luxury of the snow and mud for a bed and the heavens for a cover. Results: The first man sold his cows at auction for \$5, and upwards, while the other man occasionally buys butter for his own use.

Many a man feels satisfied with the excuse that he is not able to build a barn. I am just that unfortunate myself, yet I have 37 head of cattle all under cover nights, out of the wind, dry places to lie

the oil any one can manufacture the butter.

Mr. F. S. Peer, of East Palmyra, was introduced and spoke upon "Soiling." Mr. Peer is the author of a very finelittle work upon the same subject. He said: There are seven advantages of soiling,

viz: A saving of land.
 A saving of fence.
 A saving of food.

4. A better condition of stock. 5. Greater production of beef, milk and

6. An increased quantity and quality of

manure.
Against these there are urged only two

isadwantages. viz:

1. Requires additional labor.

2. The stock is deprived of the freedom

of running about the fields.

He proceeded to explain that one acre of soiled land is equal to four acres of pastured land. Upon his own farm he had tripled the amount of stock.

Dairying as a Business.

Dr. Sturdevant read an address upon "Dairying." from which the following brief abstract is made:

"The great curse of business is that we have to compete with bankrupt firms, that is, there are many firms doing busi-ness without knowing what their busi-

at first, would continue to the present time. The heifer's system is evidently out of order, in some way; there is no general remedy so cleaning in such milk, cream and butter yield.

cases, as bicarbonate of soda, or the common cooking soda, or or salerature, as it is sometimes called in commerce. Give of this one tablespoonful, daily, in four quarts of sealed bran, ten days, or till the milk resumes its natural taste and condition. Till then, the milk should not be used in the family, but had better be given to the pigs or chickens.—[Mirror and Farmer.]

New York Dairymans Association.

This association met at Cortland, N. Another old settler with ample resources.

The Another old settler with ample resources are the light Disc, and is reported in fooder was cut up at the ground as soon. fodder was cut up at the ground as soon as the ears were a little hardened, put up in stacks to cure, then cut into small pieces and treated to hot water twelve hours in nearly air-tight boxes along with cob-meal. Mr. Boutwell puts the comparative cost to each cow per day at twenty-one cents for hay and a little over sixteen cents for the corn fodder. It is to be doubted whether the hay fed in this experiment was as good as it should be. At any rate, it is hard to believe that the best hay is not worth more than corn-stalks. More light is wanted.

The West has three distinct methods of dairying, which are each extensively practiced—the whole milk plan of cheese-making; the factory creamery, which makes butter and utilizes the skim milk for soft, white cheese; and the cream-gathering system, that takes the cream and leaves the skim milk at home cream and leaves the skin milk at home for the pigs and calves. Each of these systems were on "deck," and to the best of their ability the friends of each defended their different ways. The price of butter even "out West," say 36 to 53 cents per pound, has had the effect of stimulating butter production, and that section seems alive to its manufacture. To talk with the exhibiters one would think that the West was all going into the creamery business in the spring. The idea has been that the cream-gathering system was a pioneer method to introduce dairying, and when the latter was established the factory system would crowd it out because butter and cheese were more profitable. But this idea is losing ground, for the high price of beef and pork makes the skim milk more valuable as food for stock than for cheese. uable as food for stock than for cheese. The transportation problem also comes in out there; to convert the cream into butter and the balance of the milk into question at once to rest.

Referring to the different styles of but ter, the American Dairymen states as follows: Factory is butter picked up here and there at different farms, or brought and there at different farms, or brought to the store to be exchanged for goods. It is graded and selected according to quality, and so packed and sent to market under the title of "factory or imitation creamery." Milled is another name for factory butter, and is made as follows: Butter of the same quality, but of any color or character is thrown into a mill where it is ground up and made. but of any color or character is thrown into a mill, where it is ground up and made of uniform color, and packed in tubs and sent to market, looking very much like a poor grade of genuine creamery. Creamery butter proper is made at a creamery, a common depot where farmers deliver their milk, or gathered cream is collected. When the milk is gathered it is allowed to stand until the cream rises, when it is skimmed off, butter made of the cream, and the skim milk turned to use either by being made into cheese or fed to animals. A creamery or butter factory cannot be run profitably unless the milk of several hundred cows can be obtained, so it is hardly proper to call butter creamery unless a number of dairymen contribute milk to its make. Butter is often made at cheese factories, Butter is often made at cheese factories, when it goes to market under the name of creamery, though in that instance it would be a borrowed name,"

ADVERTISEMENTS.

HOP BITTERS ARE THE PUREST AND BEST BITTFRS,EVER MADE.

They are compounded from Hops, Malt, Buchu, Mandrake and Dandellon,—the oldest, best, and most valuable medicines in the world, and contain all the best and most curative properties of all other remedies, being the greatest Blood Purifier, Liver Regulator, and Life and Health Restoring Agent on earth. No disease or ill health can possibly long exist where these Bitters are used, so varied and perfect are their operations.

They give new life and vigor to the aged and infirm. To all whose employments cause irregularity of the bowels or urinary organs, or who require an Apetizer, Tonic and mild Stimulant, Hop Bitters are invaluable, being highly curative, tonic and stimulating, without intoxicating.

No matter what your feelings or symptoms are, what the disease or aliment is, use Hop Bitters. Don't wait until you are sick, but if you only feel bad or miscrable, use Hop Bitters at once. It may save your life, Hundreds have been saved by so doing. \$500 will be paid for a case they will not cure or help. Do not suffer or let your friends suffer, but use and urge them to use Hop Bitters.

Remember, Hop Bitters is no vile, drugged drunken nostrum, but the Purest, and Best Medicine ever made; "the Lavalid's Friend and Hope," and no person or family should be without them. Try the Bitters to-day. are compounded from Hops, Mandrake and Dandelion,—the o

KIDNEY-WORT HAS BEEN PROVED The SUREST CURE for KIDNEY DISEASES.

Does a lame back or disordered urine indicate that you are a victim P THEN DO NOT
HESTRATE, use Kidney-Wort at once, (druggists recommend thand it will speedlily overcorn the disease and restore healthy action. or
corn the disease and restore healthy action.
The disease and restore healthy action of the disease and weaknesses, Kidney-Wort is unsurpassed,
as it will act promptly and safely.

Either Sex. Incontinence, retention of urine,
brick dust or ropy deposite, and dull dragging
pains, all speedly yield to its curative power.

33 SOLD BY ALL DEUGGISTES. Price \$1.

KIDNEY-WORT

in Elegant Script Type,
on 50 beautiful imported chromo
carda, 16c. 14 pixe. 81. 20 pears beveit
giltedged cards with lapped corners, 16c.
Agents' large album containing all the latest
styles of imported berel edge and satin fringe
cards, with linguistated premium list aprivate terms
to agents, 25c. CARD BILLS, Northford, Conn.

ADVERTISEMENTS.



GOOD FAMILY REMEDY STRICTLY PURE.

HARMLESS TO THE MOST DELICATE.

By its faithful use CONSUMPTION has been cured when other Remedies and Physi-cians have failed to effect a cure. cians have failed to effect a cure.

Wm. C. Diggs, merchant of Bowling Green,
A., writes, April 4, 1881, that he wants us to
now that the Lung Balsam has cured his
nother of consumption, after the physician
and given her up as incurable. He says,
thers knowing her case have taken the Balam and been cured; he thinks all so afflicted
should give it a trial.

Wm. A. Graham & Co., wholesale druggists,
Lanesville, Ohio, write us of the cure of Mahias Freeman, a well known citizen, who had
oen afflicted with Bronchitis in its worst
form for twelve years. The Lung Balsam
sured him, as it has many others of Bronchitis.

Voluntary Editorial from the Dubuque Her-Voluntary Editorial from the Dubaque Relable:
Allen's Lung Balsam is a popular remedy in Dubuque and surrounding country. The bruggists whom we have interviewed in reard to the sale of different remedies for Lung Balsam, not only as having the largest sale, but of giving entire satisfaction wherever it is used. In relation to its excelent curaive properties, we can speak from experience, having used it in our family for a long line.

AYER'S Ague Cure

contains an antidote for all malarial disorders which, so far as known, is used in no other remedy. It contains no Quinine, nor any mineral nor deleterious substance whatever, and consequently produces no injurious effect upon the constitution, but leaves the system as healthy as it was before the attack.

WE WARRANT AYER'S AGUE CURE to cure every case of Fever and Ague, Intermittent or Chill Fever, Remittent Fever, Dumb Ague, Bilious Fever, and Liver Complaint caused by malaria. In case of failure, after due trial, dealers are authorized, by our circular dated July 1st, 1882, to refund the money.

Dr. J. C. Ayer & Co., Lowell, Mass. Sold by all Druggists.

THE CELEBRATED HOME SANATIVE



CORDIA

revers and dyspepsia, restores the appetition and loss of sleep. The best preventive of injurious attacks of malaria known to the public. Its sale as a medicine is recommended by more prominent physicians than any other proprietary medicine in use, and as such can be sold without paying a United States liquor dealer's license. Prepared by the ST. LOUIS WINE CO., Nos. 24 and 26 North Main Street, St. Louis, Mo.

For sale by druggists and dealers generally throughout the country.

Carolina Tolu Tonic, FOR PULMONARY DISEASES AND GENERAL DEBILITY.

SURE CURE FOR MALARIA.

Sure cure for Dyspepsia in all its stages; also for Coughs, Colds, Bronchitis, Asthma, and all diseases of the Throat and Lungs; and the only remedy that is beneficial in malarial climates. This is a preparation of BALSAM of TOLE, ROCK CAN IN ANOMALY ASSESSED OF THE PROPERTY OF SURE CURE FOR MALARIA

TURKISH BATHS.

THE BEST IN THE WEST at the Southern Hotel Bath Rooms, South Fifth Street. Open from 6 o'clock a. m. to 8 o'clock p. m. Sundays, from 6 o'clock a. m. to 12 m. Owing to the great throng daily patronizing our widely known establishment, gentlemen ONLY can be accommodated.

Manhood Restored.

AGENTS can now grasp a fortune. Out fit worth \$10 free. Address E. G

ADVERTISEMENTS.

A.J.Child&Co., GENERAL PURCHASING AGENTS AND COMMISSION MERCHANTS.

orders for goods of any kind, filled at low est wholesale rates.
Consignments of everything solicited and best market prices obtained. Regular commissions charged for selling.
General Western Agents for Mishawaka Farm Wagons, St. Louis Buggies and Spring Wagons. Jones 5-Ton Stock Seale delivered for \$0.
Chicago Singer Sewing Machines, Noble Sewing Machines, Whitman's Celebrated Corn Shellers, Monarch and Little Glant Corn and Cob Mills, and a general line of Farm Implements.

ements.
Circulars and prices sent on application.
Address,
A. J. CHILD & CO.,
209 Market St., St. Louis, Mo.

EARLY PEACH by mail or express.
dollars per hundred.
A. H. BOYD & SON, Bedford, Texas.

BOYD'S

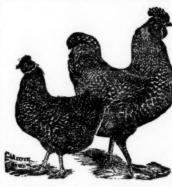
Orange Amber Seed,

ietter than ether Orange or Amber, 5 lbs. for 1 00, or 12 lbs. for \$2 00 by express, the pur-haser paying express charges. Morning Sun, Treble Co., Ohio.

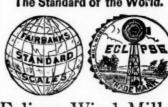


nd for circular describing latest improvements.

MASON GIBBS, Homer, Calhoun Co., Mich.



The Standard of the World.



Eclipse Wind Mills.

The Strongest Mills Made. SAFEST TO BUY.

Because warranted the best (same as Scales) and warrantee is substantial, Contain all improvements, Prices lewest, quality considered. Send for catalogue describing article wanted.

FAIRBANKS & CO.. 302 & 304 Washington Avenue, St. Louis, Mo.

AGENTS FOR THE HANCOCK INSPIRATOR.

iand, timber and prairie, for sale at low prices and easy terms, by TEXAS & PACIFIC RAIL-WAY CO. Call on or write to W. H. Abrams, Land Commissioner, Marshall, Texas.



Address, WISCONSIN CENTRAL R. R. Full particulars CHARLES L. COLBY, Land Commiss'ner MILWAUKEE, WIS.

FLORIDA.

On receipt of postage stamp, I will forward a copy of the Florida News, giving much valuable information about the climate, soil and products of this State. W. H. MANN, Manville, Putman Co., Florida.

Drury College. SPRINGFIELD, MO.

Deparments: I. College proper. II. Preparatory, III. Music. IV. Art. Course of Study: Classical, Scientific, Literary, Normal. Tuition and expenses very low, advantages considered. Tuition (save in music and art) commonly free to candidates for the ministry and children of ministers. Equal advantages to ladies and gentlemen. Address, (with stamp.)

BIC Guaranteed at home. PAY

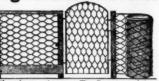
ADVERTISEMENTS.

MONARCH CORN AND COB MILL With Cast-Steel Grinders.



S. WHITMAN AGRICULTURAL CO.,

Sedgwick Steel Wire Fence



Not-work Without Barbs. It will turn dogs, and poultry, as well as the most vicious s tinjury to either fence or stock. It is just the as, gardens, stock ranges and railroads, and lawns, parks, school lots and cemeteries. Co



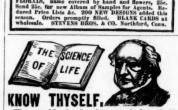


C. II. DANA, West Lebanon, N. H. **NEW RICH BLOOD**





EGGLESTON TRUSS CO., Chicago, VII. NEW CARDS FOR 1883 Name neatly printed in pretty type on 50 ENAMEL CHRONO (ards, no 1 alike, Just out, 10 ets. 20 GILT HEVEL.



THE BEST BOILER FEEDER KNOWN.

The untold miseries that result from indiscretion in early life may be alleviated and cured. Those who doubt this assertion should pruchase and read the new medical work published by the Peabody Medical Institute, Beston, edited the SCIENCE OF LIFE; OR, 600,000 acres of the best wheat, cotton and corn and, timber and prairie, for sale at low prices and easy terms, by TEXAS & PACIFIC RAIL-NAY CO. Call on or write to W. H. A BRAMS, and Commissioner, Marshall, Texas.

THIS N. Y. SINGER \$20

With \$8 set of Attachments FIEEE, Warranted perfect. Light FIEEE, Warranted perfect. Light Gentlemann of the control of the con

DR. WHITTIER, 617 St. Charles St., St. Louis, Mo.,

617 St. Charles St., St. Louis, Mo., A regular graduate of two medical colleges, has been longer engaged in the Chronic, Nervous, Skin and Blood Diseases than any other physician in St. Louis, as city papers show and all old residents know.

Nervous Prostration, Debility, Mental and Physical Weakness, Mercurial and other affections of the Throat, Skin and Bones, Blood Impurities and Blood Poisoning, Skin Affections, Old Sores and Ulcers, Impediments to Marriage, Rheumatism, Piles. Especial attention to causes from overworked brain.

Consultation at office, or by mail, free and invited. A friendly talk or opinion costs nothing. When it is inconvenient to visit the city for treatment medicines can be sent by mail or express everywhere. Curable cases guaranteed; where doubt exists it is frankly stated. Office hours, 9 a. m. to 7 p. m.; Sundays, 12 m. to 1 p. m. Pamphlets free.

MARRIAGE CUIDE, 260 PAGES, FINE PLATES,

Elegant cloth and gilt binding. Sealed for 50c in postage or currency. Over fifty wonderful pen pictures, true to life; articles on the following subjects: Who may marry; why not; why? Proper age to marry. Who marry first. Manliood; womanhood. Physical deeny. Who should marry. How life and happiness may be increased. Those married or contemplating marrying should read. It ought to be read by all adult persons, then kept under lock and key. Popular edition, same as above, with paper cover and 200 pages, 25 cents by mall, in money or postage.

Che Stock Pards.

Weekly Review of the Live Stock Market.

The New Year has thus far developed a sat isfactory trade in all the branches of live

Cattle, it will be remembered, showed a dis tinct decline last week in all the markets of the country, but there was no disastrous stag nation. And this week the business opened little higher-10 to 20 cents-for butcher stock The better grades of cattle however suitable for either; shipment or dressed beef did not show any strength.

dency to a decline, though up to Monday evening, nothing had been lost.

Hogs started out on the new week about 10 cents higher than last Saturday uptable.

Provisions were slightly higher, and the out- higher. look inviting.

Sheep last week sold at this point, relatively Sheep last week sold at this point, relatively very high. From medium to choice, the range was \$4.25 \otimes 5.50, and sales were made readily. Monday the prices for good quality held up, in spite of the fact that the Eastern Markets had dropped off considerably; the influence of the decline East, had effect here only on the commoner kinds. the commoner kinds.

The canning company is putting up tons of ce—trains are unloaded daily.

Mr. F. M. Riley an extensive sheep buyer, ap-

peared at the National Yards Monday prepared to buy liberally.

CATTLE MARKET. Receipts 24 hours-710 cattle; 3,040 hogs; 260

TUESDAY, Jan. 9 .- But few shipping cattle

here, but liberal receipts were reported to arrive. Eastern reports were unfavorable, and our markets weak on shipping cattle Good butchers steers sold at steady prices.

but cows were slow, and common to fair mix-Fresh milch cows and forward springers

wanted at \$20 to \$30 for common, and \$35 to

No. Description	Ave.	Price
32 Native steers	1,263	4 85
21 Native steers	1,068	4 45
40 Native steers	1,119	4 65
19 Native steers	1,162	4 80
37 Native steers	1,234	5 00
37 Native steers	1,251	5 00
20 Native steers	905	4 15
19 Native steets	1,207	4 75
21 Native steers	978	4 35
22 Native steers	988	4 35
20 Native cows	1,001	3 75
23 Native cows	888	3 45
18 Native cows	848	3 50
14 Southwest steers	918	4 25
23 Southwest steers	825	. 4 20
21 Native steers	1,058	4 75 4 30
	900	3 30
13 Native bulls	1,070	4 65
Receipts 24 hours-2,150 cattle;	5,820	hogs;

WEDNESDAY, Jan. 10.—Market was active on all decent cattle at a decline of about 10c from Monday morning, common grades had to sell a shade lower, but activity and firmness ruled all grades after buyers had secured the above concessions. Butchers cattle were also a lit tle lower, but the market was active on all grades. Sales:

No	. Description.	Av.	Price.
16	native cows	942	\$3 50
40	Southwest steers	996	4 55
10	native steers	1,304	5 05
10	Southwest steers	921	4.30
16	native steers	1,368	5 25
22	native cows and heifers	863	3 70
15	native steers	989	4 50
18	native steers	1,254	5 00
33	native steers	1,197	4 75
21	native cows	957	3 45
16	mixed butchers	983	3 90
11	native steers	1,165	4 75
34	native steers	1,077	4 40
16	native steers	1.560	5 30
11	native batchers	1,068	4 30
20	native steers	1,149	4 80
17	native steers	1,163	4 70
14	native steers	1,422	4 80
39	Southwest steers	987	4 10
31	native steers	1,339	4 70
18	native steers	1,154	4 62
15	native steers	1,437	5 50
46	native steers	1,163	4 65
25	native cows	1,128	3 85
14	native cows	1,052	3 50
13	native steers	1,250	4 70
21	native steers	1,035	4 40
14	native butchers	1,030	4 10
19	Southwest steers	953	4 25
17	native steers	1,048	4 45
19	Southwest steers	996	4 25
25 17	native steers	1,116	4 50
	native steers	1,095	4 50
13	native steers	1,212	4 80
79	native steers	1,146	4 50
15	native steers	1,339	5 25
94	native steers	1,442	5 10
14	native steers	1,417	5 30
18	native steers	1,535	5 15
15	native steers	1,133	4 62
24	native steers	1,124	4 90
35	native steers		4 90
24	native steers	1,343	4 75
			4 50
Re	reipts 24 hours—1,600 cattle; 6,2	80 hog	8; 2,280

THURSDAY, January 11, 1883.-Market opened dull, some nice tidy steers sold but a shade lower, while near all heavy and coarse steers sold about 10c. lower. Receipts were liberal but all sold, and market closed active. Butchers cattle sold a shade easier, and common to

SALES.

fair cows are slow.

	O'CHADO'C		
No	. Description.	Av.	Price.
19	native butchers	1080	\$4 40
19	native butchers	1,019	4 35
19	mixed butchers	1,174	4 60
24	native steers	1,120	4 65
17	native butchers	1,062	4 40
37	native heifers	1007	4 00
19	native steers	1,251	4 95
18	native steers	1,030	4 50
0.5	native cows	975	3 50
28	native heifers	663	3 50
36	native steers	1,213	
34	native steers	1.273	4 65
31	native steers	1,292	
15	Kansas oxen	1,502	4 50
30	native steers	1,440	
64	native steers	1,315	4 90
10	native steers	1,388	5 20
22	native cows	914	
15	native steers	1.242	4 75
16	native steers	1,188	4 60
10	native steers	1,113	4 25
19	native cows	1,021	3 37
11	native steers	1.162	4 70
16	native cows	1,096	
19	native steers	1,264	4 50
11	native butchers	1.028	
16	native cows	791	
36	sou'west steers	1,152	
eh	ceipts 24 hours—680- cattle; 380 eep.	0 hog	rs; 710
- 1	reiday ton 10 1999 The bourse		

Friday Jan. 12, 1883.—The heavy runs of the past few days have been well cleared up, here and elsewhere. Market was a shade easier on all cattle, but closed about steady at range

native steers	1,035	\$4 37
sou'west steers	993	4 10
native cows	1.011	3 50
native steers	1,253	4 70
Indian mixed	743	3 37
native steers	1,173	4 70
native cows-heifrs	939	3 60
native cows	804	3 50
native steers	1.206	4 60
native steers	1,187	4 65
HOG MARKET.		
Trugger Ion Oth 1000 Manh		

was not, however, a confident view of operators and values shrank away and the market toked easy at the lowest figures of the day, yet generally above saturday's closing.

OATS—Grades higher, offerings freer and to choice heavy packing \$6 00 to \$610; Good to choice heavy packing \$6 10 to \$620. Butchers and fancy heavy \$6 20 to \$6 30. Light hogs \$5 25 to \$5 50. Fair to good.

	SALES.	
52303 \$6 25 42407 6 30 19 249 6 10		45 255 \$6 00 84 325 6 30 49 272 6 10

78250 6 10	59261 6 05
61252 6 05	52 136 6 05
30277 6 10	46246 6 05
31 183 5 85	63., 243 6 10
60366 6 15	24 276 6 10
8# 265 6 1214	27 . 182 5 90
47 6 12 %	Indian hogs
	49 246 5 60
45 275 6 10	59299 6 15
58 184 5 85	45173 5 75
26 241 6 10	22283 6 10
122 261 6 10	47362 6 20
102272 6 12 14	49305 6 20
32277 6 20	30180 5 85
52321 6 20	38 260 6 10
20260 6 10	40 264 6 15
37278 6 12*;	55249 6 10
50188 4 90	74240 5 50
90100 4 100	14240 3 30

SHEEP-Market, active and steady. SALES

WEDNESDAY, Jan, 10th, 1883.-Market opened Hogs started out on the new week about 10 cents higher than last Saturday, which was stronger than the proceding days of last loc higher, but bulk of sales show an advance of about 5c. Light hogs were active and

All sold.
We quote—Mixed packing \$6 00 to \$6,10; Good

\$5 80 to \$6 00. Sales:		 4		-	j
83\$6 15	4.1	 929	\$6	10 fe	1
211805 80			6		d
232386 00			6	001	
15 216 6 00			6		Ī
38 303 6 12 14			6		Ó
205 90			6	05 em	
696 10			6	0.0	
532596 05			6		ŀ
625 95			6		1
246 00			6		
576 10			6	40	
476 10					ð
396 10			6		
212686 05			6	TO.	
326 15			6	15.00	
366 30			6		Ĝ
170 000 0 17			6	30	
1762806 15			6	Att.	
296 20			6		11
466 15			6		à
656 25			6	00	
2012646 05			5		
52600	45	 258.	6	05 du	•

Sheep market is quiet

THURSDAY, Jan., 11th, 1883.-Market for ching hogs opened with advance lost-5c to loe lower. Packers wanted the hogs at the decline, and when sellers found they could not uphold figures they cut loose, and market ruled active to extent of supply. Yorkers were active with bulk of sales at

We quote-Mixed packing \$5 90 to \$6 65mostly \$6.00 to \$6.05: Good to choice heavy packing \$6.05 to \$6.15. Butchers and fancy heavy \$6.15 to \$6.30. Fair to good heavy Yorkers \$5 80 to \$6 00-bulk \$5 90. Culls \$5 90.

Culls \$5 25 to \$5 70.		
42298\$6 15	103297\$6 15	ı
656 05	1252736 10	1
405 00	1153926 15	1
29 280 6 15	273056 16	
211945 90	121905 80	
306 00	1425 95	,
526 20	1892346 05	
31 207 6 00	141855 95	-
526 15	1151755 85	1
211865 90	136 00	Ġ
316 00	232015 95	-
21 269 6 00	38 315 6 25	i
412906 15	282836 15	1
576 10	18 288 6 10	1
48200 5 95	101905 90	1
59 269 6 05	27 2706 00	
56 6 05	281915 95	
59 6 00	191986 00	H
286 00	402836 05	ľ

FRIDAY, Jan. 12, 1883.-Market opened fairly active for packing grades at Thursday's closing range of prices. A few inferior heavy sold at \$5.90, and a few choice heavy at \$6.20—but

what's Saved is Gained.

What's Saved is Gained.

Workingmen will economize by employing Dr. Pierce's Medicines. His prime. None offering.

CASTOR BEANS—Scarce. Prime steady at 137½.

Light hogs were active and stronger—Fair to good Yorkers sold at \$5 90 to \$6 00, and light bacon hogs averaging 200 to 230 lbs. sold at \$6 00 to \$6 10.

Culls and must hogs—Quote them at \$4 50 to \$5 75.

5 75.			١.
No. Av. Price	. No. Av. Price.	No. Av. Price.	1
	58308\$6 20		10
	621926 00		
612736 17	550 232 6 10	282146 00	1
411956 00	30315,6 05		
432566 00	281956 00		1
42205595	762956 05		1
55310615	772876 05	652926 05	l t
23214600	1863866 37	12222376 10	10
43302610	572846 25	213296 25	1
581986 00	232086 10	412126 10	1
46271610		372846 12 15	
72286625		122465 90	1 1
25232655		113125 90	1
232086 10		581986 00	t
642695 15		63 907 6.05	1 0

SHEEP--Good to choice sheep selling at very es, but all pregnant ewes, and thin or eep were slow and weak. Sales: No. Av. Price. No. Av. Price. No. Av. Price 75. 124, \$5 25 87. 109, \$4 50 12. 133, \$5 00 10, 102, 4 124 104, 91, 4 124, 71, 119, 5 00 86, 101, 4 085, 108, 4 \(\frac{1}{3}\)78 55, 101, 3 \(\frac{2}{3}\)24 1\(\text{by av 3}\) 108 at 2 \(\text{60}\) at 2 \(\text{60}\) 10 s at 2 \(\text{60}\)

GENERAL MARKET.

FLOUR:-X \$3.00 to \$3.10: XX \$3.20 to \$2.25

XXX \$3.60 to \$3.75; family, \$4.25; choice, \$4.70; fancy, \$4.25. Patents \$5.50 to \$6.25. WHEAT—grades, excepting No. 4 red winter, were lower and futures enlisted little interest and were easier, but not subject to much change from Saturday's prices in the closing. Cash movement light. Receipts for 48 hours only 53,648 bushels, and shipments nothing of significance. Sample offerings were quotably unchanged, but market firm. Futures were weak and dull throughout, and transactions small with the principal interest in the March deal, and that small also. The market was higher early but later it shrank away, and ings were at the lowest of the day.

It appears that even with adverse weather that the late market value, is not very well sustainable, and how it could be in in the readily explainable. The course of the market yesterday is represented in the following sales

Red winter.	Range.
No. 2 cash	
January	
ebruary	
darch	1 03 2 @ 1 034
April	bid 1053
May	1 07 @ 1 063
No. 3 cash	93 4 60 93
No. 4 cash	bid 875
CORN-Grades higher,t	out earlier prices were
not kept up, although th	ev closed above Sat
irday's. New mixed wa	al a female a female and
early prices not obtain	able. Shippers were
he competitors for No	. 2 mixed and other
grades sold to order and	distilling to the
grades sold to order and	distining buyers. Of

he forenoon board the market was irregula and quite active. Prices were a little easier, out later improved with free offerings. There

strong with inquiry unsupplied at top. Fu-tures were active and higher but sellers were Sales cash and otherwise closed as fol-

HAY-Unchanged. Offerings were largely of the lower grades, which continue dead dull; but choice met a good local demand at steady rates. Sales: E. trk-1 car redtop mixed at \$9, 3 mixed at \$10, 4 prime do at \$11@11 50, 2 prime timothy at \$12, 4 strictly prime at \$1 250, 1 do at \$13, 4 choice at \$14@14 50. This side—4 cars good prairie at \$86850, 3 prime do at \$9,4 choice do at \$9506975, 2 mixed at 10, 2 strictly prime timothy at \$1361350, 2 nearly choice at \$14.25, 5 choice at \$14.75, 3 at \$15, 3 gilt edge at

BUTTER-A very light call only, on local account; prices easy; but unchanged, and stocks large. We quote: Creamery—ordinary at 35@37c, choice at 38@39c—fancy at 40c: dairy—choice 30@32c, poorer grades and packed at 121/4 for low to 25@26c for medium; roll—country 14@16c in lots—small quantities bring more; dairy roll at 20@22c—small lots choice at 24@25c. Sale 20 tubs ladie-packed

CHEESE-Easy, though selling fairly. Full cream at 121/2@14c, prime part skim 7@8c, inferior at 3c for low to 6c for fair.

EGGS-Quiet but firm for fresh at 22c. light local consumptive demand only, and that not great enough to absorb current re ceipts. Stale, etc., in plentiful supply, dull

POULTRY-Dressed of all kinds in light of ering, steady and firm; demand fair for choice ell-handled, but roughly-dressed and thin of very description slow. We quote: Turkeys t 13c # b for rough, 14@15c for choice; chick-ns—Small to medium \$2@250; fair to good 75@3 25: choice \$3 50@3 75; fancy large \$4; ucks—Medium \$3 25@3 75; good to choice \$4 0 \$4 50; fancy large and fat \$4 75@5; geese— ough and thin \$3 50@4; fair to good \$4 50@5 50; noice \$6@7; fancy and extra \$7 50@9. Live

GAME-Rabbit dull and weak-offerings ly moderate, but buyers holding off in ancipation of large receipts and lower prices; esh receipts of quail ready sale at firm prices; ouse quiet; pheasants scarce and firm; acks in good demand; venison dull and lower. Sales: Grouse at \$5; pheasant at \$6; quail \$150; ducks—mallard at \$240@250 (one lot of 231/4 dozen sold at \$2 40), teal at \$2, common and mixed \$1 50; rabbit at \$1 25 for Missouri and Illinois, \$1 for Kansas; jack rabbit \$3: squirrel 50@60c; deer 6@7c # b gross; venison saddles 11@121/c & t; wild turkeys 10@11e # th: 'possum 10c to 30c each: wild pigeon

POTATOES-Receipts and offerings light and embrace much frozen stock. Market steady for sound, with a fair demand. Early not for it. rose at 85! to 1214c: peerless and fluke at 85% 90c, peachblow at 80@85c; burbanks af 92%@ 95c; damaged, inferior, etc., less.

ONIONS-Easy: a limited local demand only Sales; 50 sacks yellow at 65c: 90 prime do at ence

CABBAGE—Quotable at \$8@10 per 100 loose, \$2\alpha 25 per crate in shipping orders.

DRIED FRUIT—Scarce, and wanted. We

King & Proud, Oregon, Holt county, Mo., say: "We are selling Brown's Iron Bitters, and it is giving good satisfacquote: Apples—dark 5@\sc for inferior to 6\sc @ 7c for fair, bright at 7\sc @\sc , sliced at 8@\sc evaporated at 10@\delte. Peaches—mixed and low halves 4\sc @5\sc , halves at 5\sc @6c, prime cheat one's self. Do good with what thou hast, or it will do thee no good. bright do at 64@4c. Sales of small lots at

GRASS SEEDS—Offering very light; demand (mainly speculative) brisk and prices firm.

We quote: Clover \$7.25@7.50, timothy \$160@ safely embedded and preserved.— 1 75, German millet .80@92½c, common millet .60@70c, Hungarian .60@75c, redtop 45@70c. Sale: 1 car German millet at 871/c.

serves for a bright manhood, there is no such word as—fail!—[Bulwer Lytton FLAXSEED-In demand at \$1 17 to \$120latter for round lots. Sales: Small sacked lots \$1 16@1 17, 1 car, including some castor beans,

BROOM CORN—Selling fairly,crooked 2½@3c sults are never found to be levelled and smooth. That work is for the traveller choice long green 6@61/2c. HONEY-Dull and nominal. Combatlee for

large or dark to 18c for choice bright in small packages, extracted at 8@9c, strained at 6%@7, choice in smaller quantities more.

SORGHUM—Scarce and firm; wanted at 35c to 40c.

Groceries.

What it did for an Old Lady.

COSHOCTON STATION, N. Y., Dec. 28, 1878.—GENTS:—A number of people had been using your Bitters here, and with marked effect. In one case, a lady of over seventy years, had been sick for years, and for the past ten years has not been able to be around half the time. About six months ago she got so feeble she was HELPLESS. Her old remedies, or physicians, being of no avail, I sent to Deposit, forty-five miles away, and got a bottle of Hop Bitters. It improved her so she was able to dress herself and walk about the house. When she had taken COFFEE-Rio common 8@81/c; do good com mon 8½ @9c; do fair to good 9½ @10c; do prime to choice 11@11½c; do strictly choice to fancy golden 114@15c; Costa Rica 14c; Laguayra 12@ sh 124c; Santos (light golden) 12c; Mexican 11@ 124c; Guatemala coffee 14c; old government Do @27c; Singapore Java 20@22c.

REFINED SUGARS-Belcher's granulated standard 9%c; powdered 9%c; fine powdered 9%c; coffee sugar—standard A 9%c; Missouri A 9c; extra C 8%c; standard C 8%c; yellow C 8%c. Refined yellow sugar sold at relative prices.

NEW ORLEANS SUGAR-We quote: Common

14@61/e; fair 7@71/e; strictly prime 71/@71/e; strictly choice 7%c; clarified sugar, white 8%c do yellow 8@84c. Yellow, refined—Fair 74c; prime 74c; choice 74c; fancy 8c. MOLASSES AND SYRUPS—LOUISIANA—We

note: choice 58c; prime 55c; fair 53c; sorghum choice bbls & gallon 42c do prime do 43@40c-RICE—Choice California 6½@6%c; choice Louisiana 6¼c; prime 6c; Rangoon 5%c.

Furs, Wool, Hides, Etc.

-Demand very fair, and all offered salable at full quotations. Quote: Raccoon—No. 1 large 70c and do.small 55c; No. 2 30c, No. 3 20c No. 4 10c, Mink—No. 1 40c, No. 2 25c, No. 3 20c scabs 5c. Skunk—Black 60c@\$1 00; shortstripe 30@66c; narrow 15@25c; white and broad 7@10c inside figures for territory and one and which only make conspicuous the fact that

which only make conspicuous the fact that inside figures for territory and open and outside figures for cased; civit 100±15c; wild cat 100±10c; house do 100±15c; wolf—large 25c to \$5; per 35c. Fox.—G. 10c to 65c open and 25c to 95c. Fox.—G. 10c to 65c open and 25c to 95c cased; kits 10c to 25c; red 25c to 75c open to 90c cased; kits 10c to 25c; red 25c to 90c c home and export movement is not y explainable. The course of the market day is represented in the following sales of \$1 cased. Otter—No. 1 \$7; No. 2 \$6; No. 3 \$2.50; No. 4 \$1—open 10 \$20 per cent. less, and gists. cubs 25@40c. Beaver 75c to \$4 each or \$1@1 50
per lb for clean well pelted. Bear—Brown
and grizzly \$1 to \$5; black \$1 to \$10—cubs 75c@

When the ten-cent Diamond Dye will
make them good as new. They are perfect. make them good as new. They are perfect. Badger 10c to 75c. Opossum 5@10c open to 10@15c cased. Muskrat 5c to 15c. South rate 20@30 per cent. less and Kansas or North-ern Illinois 15@20 per cent. more than above

WOOL—Nominal. Tub-washed at 30@34c; unwashed at 20c to24c. Sales small lot medium unwashed slightly burry at 21c.

FEATHERS—In fair demand and steady. Prime L. G. at 55c in large to 56c in small WOOL-Nominal. Tub-washed at 30@34c;

Prime L. G. at 55c in large to 56c in sacks; No. 2 and wet do 45@47c; mixed loc to oc; tare 3@10 per cent.

HIDES—Dry flint firm. Green salt quiet but

somebody, and to that person whater he says has an enhanced value.—Emers steady. We quote: Dry flint western 17c; dry flint western damaged 14c; dry flint southern damaged 18g; dry flint southern damaged 13½c; dry flint, bulls or stags, 10c; dry salted 12½c; dry salted, damaged 10½c; green salted 8½c; green salted damaged 10½c; green salted 8½c; green salted damaged, 6½c; green salted, branded, 7½c; green salted, bulls or stags, 6c; partcured 7½c; green salted, bulls or stags, 6c; partcured 7½c; green uncured, 7c.

The attention of our readers is directed.

DEER SKINS-We quote: Dry at 30@33-salted and damaged 20@22c; green salted 12%c; green 15c; antelope 24@25c dry

dry 25@80c, shearings, 5@25c

The attention of our readers is directed to the advertisment of R. D. Sperry & Co., of Batavia, Ill., in another column. Their Farmers Boiler for profit is an ex-SHEEP PELTS-Very dull. We quote: sound (wool estimated at 24c per th)—green at 60 to 1., men who feed economically, and the firm

men who feed economically, and the firm

entirely reliable



CHAFF.

Ignorance is the mother of devotion, Jeremy Taylor.

None have less praise than those who

Do not buy and use WISE'S Axle Grease, unless you want the very best.

No star ever rose or fell without influ-

The first and worst of all faults is to

In the lexicon of youth, which fate re

What it did for an Old Lady.

derived great benefit from their use.

W. B. HATHAWAY,
Agt. U. S. Ex. Co.

There is no time in a man's life when he is so great as when he cheerfully bow

to the necessity of his position, and makes the best of it.

A generous man will place benefits he confers beneath his feet; those he receives nearest his heart.

Ayer's Sarsaprilla is the most potent

Each man is a hero and an oracle to

impossible.

Given under my Hand and Seal this 18th day of January, 1883.



COUPON

THESE ARE NOT THE SMALL VARIETY, RUT LARGE AND MODEL HOGS. BEST Feeders, Earliest Maturers, and cut more lean meat to the fat of any known hog. Pigs 75 to 90 days old for sale cheap. NOW IS THE TIME TO BUY!

WASHINGTON

CHAS. G. McHATTON, FULTON, MO.





HIRAM SIBLEY & CO., Seedsmen, end free, Grapes, J. BEST THE MAN

with 1,000,000 Young ONES WHO WANTS BIG BERRIES FRUITING—Berries AND LOTS OF THEM, HEADQUARTERS for new, early BLACK CAP NOT HEAD

HO! FOR SPRING, 1883.

ROOT GRAFTS of Apple, Pear, Plum, Cherry and Quince—best kinds, true to name and packed in best condition. Order at once and yet leading kinds, Handson Young Everpacked in best condition. Order at ones and get leading kinds. Handsome young Evergreens, 7 kinds, 12 to 20 inches, once transplanted, well rooted and nicely shaped, at half price; 2d and 3d class stocks of apple, pear, plum, cherry and peach for planting out to bud, or graft a fine stock. Am. Sweet Chestmuts, Black Walnuts, Pecans, Barberrys, Magnolias, Calacanthuses, Catalpas, vines, cuttings, hedge-plants, Dublius, Tuberoses, Paponies, prepared seeds of Apple, Pear, Peach and Cherry. Send for new price list without delay and secure your stock for spring.

JOHN RIORDAN & CO.,

Bloomington, Ill. so she was able to dress herself and waik about the house. When she had taken the second bottle she was able to take care of her own room and walk out to her neighbor's, and has improved all the time since. My wife and children also have No one ever slips on a rough road; no one ever did much, if he never had to overcome difficulties that to him seemed

APPLE SEED. Prime No. 1 Seed, at \$4 per bushel.

JAMES A. ROOT,
Skaneateles, N. Y.

W.P. MESLER & CO.,

COBDEN, ILLINOIS, MANUFACTURERS AND DEALERS IN

Fruit and Vegetable

BOXES.

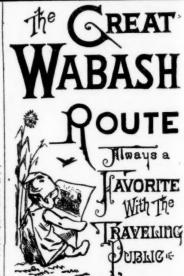
A large stock of dry material on hand. Large orders filled on short notice. Send for price list.



THE BATCHELLER
Barrel Churn; THE
CHEAPEST AND BEST. No
fron rim too for butter
or cream to adhere to.
All sizes made up to 30e
gallons. Lever and Rolele Butter workers, also
all sizes Box Churns for
Creamerys. All goods
warranted as represented. One Dairy Churn ated. One Dairy Churn atone Dairy Churn a nolesale price where have no agent. Sent circulars to second H. F. BATCHELLER & SON, Rock Falls, Ills.

50 CENTS
For Three Months.

THE NEW VOLUME (NINETEEN) OF Demorest's Hlustrated Monthly Magazine for 1883 is the best and cheapest Family Magazine for 1883 is the best and cheapest Family Magazine published, printed on the finest tinted paper, size \$\frac{1}{2}\times\$ 1/2 inches. The three numbers now ready of Volume 19 weigh 1\frac{1}{2}\times\$ pounds and contain 210 pages of large, clear print. New Novelties, Stories, Biographies, Poetry, Travels, and valuable information of the day and for the household. In demand by every family. 144 Illustrations, 6 Photo Plates and 4 Oil Pictures. W. JENNINGS DEMOREST, Publisher, 17 East 14th Street, New York. Single copies, Twenty Cents; yearly subscription, Two Dollars.



Providing BETTER FACILITIES in the way THROUGH CARS and Elegant Passenger Equipment than any of its competitions. 3,50 miles of road, passing through Six free States, and reaching in the most direct man ner all of the

Great Business Centres of the West.

Send for the Largest and Best County Map of the Middle and Western States ever published. Mailed FREE to any address. For Tickets, Sleeping Car Berths, etc., call at GRAND UNION TICKET OFFICE. 120 N. Fourth St., cor. Pine, St. Louis, Mo.

E. H. COFFIN, Ticket Agent. J. C. GAULT, Sec. Vice-President, ST. LOUIS, MO. H. C. TOWNSEND, Gen. Pass. Agt.,

A Million Readers.



128 ILLUSTRATED PAGES EACH MONTH. ies, Travels, Scientific and Instructive Acticles. Fun for the s and Girls. On receipt of \$3.00 the Popular Monthly will be to any address for one year together with one beautiful

CHROMO EACH MONTH FREE Making twelve beautiful Pictures given away during the year.

These are alone worth the price charged for the Magazine.

Agenta can make big money taking orders for this Magazine.

Sample Copies of the Popular Monthly and one Picture sent on receipt of 25 cents. Address | MRS. FRANK LESLIE,

ing; o other cane; pare 1 certair produ and or the av all kin quite course and n farme it. It that k truth i turers champ who so not pa or per

Some

referen

office to Valley

to the form si

as to gi

manufa of exh

bottles

sent the

commi

request

hibitio of their

ninety

only th

a perso Indian

Growe

would

terest i

as othe

sample dozen

ing pre

not tak

possib

took o

giving of eacl

publish

mittee

the las ready

> surpris sippi 1 in you The

ples.

Mr.

ting ju staten juice o We in a g 60 per thoug to 70 p bagas per ce mill, When at the weeks expos cent. Altl

ments

Our

some good Cane on the for a ciatio incre a sta

same

season the ca

amou

than a